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# The Whole



# Dog Journal™

A monthly guide to natural dog care and training

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# Bottoms Up!

*We may as well get it over with . . .*

BY NANCY KERNS

There are *two* articles in this issue that deal with various things that happen at the dog's nether end. "Dog Gone Dung" contains everything you ever wanted to know about dog poo – and come on, admit it: You *were* afraid to ask. "Butt Scoot Boogie" is about canine anal glands, and what can go wrong with them, and what you should do about it. Assigned months apart to two, ahem, *regular* WDJ contributors, they arrived in my e-mail in-box at about the same time . . . and so I thought, what the heck, let's just go ahead and get it all over with at once.

Teaching dogs to read? Have we finally lost our minds? Actually, no! CJ Puotinen's fascinating article on page 10 is about the efforts of Dr. Bonnie Bergin, who trains dogs for people with all kinds of challenges, including the lack of ability to speak. She realized long ago that dogs could be trained to recognize symbols – even letters of the alphabet – as cues for behavior. Creative people (such as CJ herself) are putting dogs' ability to read to work in helping *kids* learn to read. You have to check it out.

Finally, concerning Pat Miller's article on the facing page: Many of us bring our dogs with us when we take road trips or just run errands in our cars. The article reminds us of some critical car safety tips we ought to keep in mind – for the sake of our dogs, ourselves, and our fellow drivers. Loose dogs, especially excitable or unruly ones, really *are* a hazard to themselves and others in cars.

A few days after Pat sent me the article, I received the following e-mail from her:

"So, I'm driving back through town after doing shelter assessments this morning and in the next lane (a one-way street downtown), I

see a sedan with the front passenger window open and a tricolor Beagle-mix half-hanging out the window.

"Hunh, I mused. I just wrote about that! He really *could* fall out of that window!

"So we go a couple of blocks, and I pull slightly ahead of the car. After I pass it, I glance in my rearview window – just in time to see a tricolor blob go SPLAT! onto the pavement.

"I jam on the brakes, hit my flashers, jump out of my van, and dash after the dog, who is now limping down the street away from me, a little stunned, but walking. I call to him, with no acknowledgment. He turns into a parking lot that goes through to a busy street. Just then the owner comes up behind me and calls to the dog, who looks up but doesn't stop. The owner calls again, running toward the dog, and this time the dog pauses. The owner reaches for the dog's collar, but the dog evades his reach and circles back toward me. I kneel and schmooze him up, he comes up to me, and I calmly grasp his collar and hold him until his owner steps up to take him.

"As we walk back through the traffic jam we've created, the owner thanks me and says, I guess I won't let him do *that* anymore!

"Fortunately, no harm done, but in my 50-plus years I've never actually *seen* a dog fall out a car window. Talk about synchronicity!"

Pat finished her story by writing, "Hey, Nance, do you think you could use an article about winning the lottery?"



NK

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# Riding in Cars With Dogs

*Safety gear and calm behavior should be required for canine passengers.*

BY PAT MILLER

**W**hen I'm driving on the road and see a dog in someone else's car, it makes me smile. I love it when people care enough about their dogs to chauffeur them around town. I love it even more when the dog is in a crate or seat belted in place.

My smile quickly vanishes, however, if the dog has her head stuck out the window, is sitting in the driver's lap, darting back and forth across the seats, or worse, riding loose in the back of an open pickup truck. And the ultimate crime – leaving a dog in a hot car – motivates me to grab my cell phone and call out the animal cops.

As much as we love our dogs and want them with us all the time, we have an incontrovertible obligation to transport them safely, for their own welfare as well as ours, and that of other drivers on the roads. All dogs, large and small, should learn to ride politely in their cars. There's a long list of



**Dogs are safest in the car when they are in a sturdy crate that is securely fastened in place, or wearing a harness and a seatbelt in the back seat of the car. Owners should carry water and a leash, and make sure their friends are wearing ID tags.**



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## WHAT YOU CAN DO . . .

- **Consider all the canine passenger safeguards and select the one that will best suit your dog and your circumstances.**
- **Train your dog to behave in the car like you train him to do anything: by setting him up for success, and reinforcing him for the desired calm behavior.**
- **Be on the lookout for dogs at risk of heatstroke in cars on warm days. Don't hesitate to call animal protection authorities or the police department if you see a dog suffering from the heat.**

safety hazards concomitant with having an unrestrained obstreperous canine in a moving vehicle. Here are some:

- A dog who interferes with driver's physical ability to drive the car. A dog sitting on the driver's lap can interfere with steering. A dog who gets on or under the accelerator or brake pedals, hits the gear shift, or blocks the driver's view can cause an accident.
- A dog who interferes with driver's *mental* ability to drive the car. When the driver's attention is taken away from the road to deal with dog's behavior, the dog has become a safety hazard.
- A loose dog can become a flying missile if the car stops abruptly or is hit by another car.
- If the car windows break or the doors pop open in an accident, a loose dog can

escape, get hit on the road, or run off and become lost.

- An unsecured dog can interfere with the efforts of rescue workers in an emergency.
- A dog with her head out the window can suffer injury to her eyes from bits of flying debris, or worse, can have her head smashed by objects that pass too close to the car (other vehicle mirrors, signs, branches).
- A loose dog can fall or jump out of an open window or back of a truck.
- The temperature in a parked car on a warm (not even hot!) day can kill a dog.

I'm probably missing some, but I hope that's enough to make you stop and think next time you're planning an outing with your furry friend. That doesn't mean you have to leave your dog buddy at home; there

are lots of options for keeping everyone safe while enjoying canine company in your car.

## Reducing the risk

Not every dog loves car outings. Some high-risk car behavior is a result of canine stress and/or arousal. Reducing stress and arousal will decrease car-ride risks and increase car-ride enjoyment for both of you.

Tools and techniques for reducing stress in the car include covering your dog's crate to reduce sensory stimulation; using a Calming Cap (see "Now You See It, Now You Don't," next page) for the same purpose; and incorporating a program of counter-conditioning and desensitization to overcome your dog's car-related fears and arousal triggers (see "Road Scholar," May 2001).

Additional tools for maximizing your car safety and pleasure are those that restrict your dog's movement about the cabin. Many dog owners choose crating as a relatively safe car restraint option. This can be an excellent choice, and it does have drawbacks. To be super-safe, the crate needs to be fastened securely in the back of the vehicle.

Space is another consideration. Crates require a lot of room. If you have a mini-car and a maxi-dog, there's no room for a crate – you need to explore other options, like canine seat belts.

When the "fasten your seatbelt" sign lights up on your dashboard, so can your dog's. Many dogs ride comfortably and calmly secured in their seats with a belt designed for just that purpose. There are numerous models to choose from. (See "Seat Belt Your Dog," February 2004.)

To avoid the potential for serious injury to his neck, though, be sure to **select one that attaches to a harness, not your dog's regular collar.** Some dogs who habitually pace nervously back and forth in their cars settle down and relax when restricted by a seat belt. It's easier on *your* nerves, too!

If you choose the seat belt route, be aware that the air bag danger that precludes small children from riding in the front passenger seat applies to dogs, too. Either disable your passenger air bag so Rover can ride in the front, or strap him into his seat belt in the back seat.

There are dogs who are not good seat

belt candidates – typically puppies, young dogs, and others who might be tempted to try their teeth out on the seat belt or harness straps. Reprimanding your dog for chewing his belt comes under the "driver distraction" risk category. You can try applying a sour-tasting product such as Bitter Apple to the straps. This works for some dogs – but not all.

Another solution for strap chewers is a tasty stuffed Kong or other chew to keep their teeth otherwise occupied (see "King Kongs," October 2000). You'll need to secure the Kong so it doesn't fall off the seat out of reach of your dog, by running a cord through the hole at the small end and tying it to a handy spot in the car.

If that doesn't work, you may need to give in and buy a bigger vehicle to accommodate a crate, or settle for a physical barrier. You might also teach your dog to love a basket muzzle and have him wear one while he's belted in the back.

Barriers are designed for use in station wagons, mini-vans, and SUVs, and range in price from \$40 to \$80. The metal barriers are pressure mounted, and tend to be stur-

## Cooling Tools for Hot Dogs

If you're one who likes to take your dog places with you, sooner or later you'll inevitably be faced with the dilemma of what to do with him when you have to duck into a place of business that doesn't allow dogs. Every year, dogs are left in cars by unthinking owners. It doesn't have to be hot out – just warm and sunny – for the temperature in your car to rise quickly enough for your dog to suffer brain damage, even death.

A surprising number of businesses allow dogs to accompany their owners inside. Restaurants aside, operating on the principle of "It's better to ask forgiveness than permission," if it doesn't say "No Dogs" on the door, try taking your well-behaved dog with you. If you're asked to remove him, politely acquiesce without argument – it never hurts to try!

If you must leave your dog in the car at times, arm yourself with products designed to keep him safe and cool. You can purchase car

shades and reflector cloths to keep temperatures down, and window vent guards that allow you to leave car windows open but prevent your dog from jumping out.

Wet pads and scarves that take advantage of the effect of water evaporation can help

your dog keep his cool for a brief stint in the car. Many dog professionals use solar or battery powered fans or ones that plug into a car adapter to provide a cooling breeze for car-bound canines.

You may also want to purchase a portable thermometer with a remote reader. Katy Malcolm, a Peaceable Paws trainer and affiliate, carries one of these when she leaves her Border Collie, Josie, in her car. She can see immediately when the temperature in the car starts to rise, and removes the dog if the digits register above 80 degrees.

If you foolishly choose to leave your dog in your car unattended on a warm day, be prepared to return to a broken car window and a missing dog. The general public has become aware of the danger to dogs in cars, and will quickly call the authorities, who shouldn't hesitate to take whatever steps are necessary to save your dog. That's the best-case scenario. You don't even want to think about the worst-case alternative.



Thermometer with remote reader, \$25 (product #RAR 381-S). Oregon Scientific, (949) 608-2848 or [oregonscientific.com](http://oregonscientific.com)



dier than the mesh ones, which attach with straps.

Barriers are not as safe as crates or seat belts. While they may protect human passengers from flying dog bodies in case of a wreck, they don't protect the dog from getting bounced about the back of the vehicle, or stop him from escaping through broken windows. If you have a large dog and a small car, barriers won't work; you're still out of luck – and will need to reconsider the seat belt option.

## Good car manners

Congratulations if you have already accustomed your dog to riding in the back seat (or “way back” of your car) with a harness and securely fastened seat belt. This, or a securely fastened crate, is the safest mode of car travel for your dog. But if you choose to ride with your dog unrestrained in your car, the least you must do is teach him to be calm and lie down in a safe spot other than your lap. (Dogs who are quiet and well-mannered in the car, but prefer to sit up and look out the windows, would be safer if they were secured with a harness and seat belt. When sitting up, a dog's center of gravity is higher, putting the dog at higher risk of being thrown through the air in an accident.)

Some dogs prefer to lie down on the back seat, the floor of the back seat, or the way back of a station wagon, with little or no guidance. Dubhy, our Scottish Terrier, lies like a rock on the back seat of a car – you wouldn't even know he's there. In contrast, Bonnie, our newest acquisition, paces nervously in the car, and if allowed will attempt to climb into the front seat, and sometimes my lap. Given how deeply ingrained this behavior is, attempting to train her to lie down in the back seat would probably cause both of us undue stress. We crate her in the car, even for short trips.

Your dog should have a solid and reliable “down” behavior on verbal cue (see “Sit Happens,” February 2001) before you expect him to ride politely in your car. If he does have a solid down, you can cue him (and reward!) for lying down quietly while you are driving (or rather, when you are safely stopped during drives).

If your dog does *not* reliably respond to a “down” cue, a program to teach polite car manners is in order. This will require two people – one to drive the car, one to reinforce your dog for appropriate car behavior. A large empty parking lot is a good place to start your lessons, to minimize distractions for both driver and dog.

## Now You See It, Now You Don't

The Calming Cap™ is a relatively new dog behavior management/modification aid created by the Marin Humane Society's Director of Behavior and Training, Trish King, CPDT, CDBC, in collaboration with Lisa Moore, CPDT. Based on the concept of the hoods used to keep hawks and falcons calm during transport, the Cap screens out stimuli that arouse and excite a reactive dog. Made of a light single panel sheer fabric, it slips over a dog's muzzle and covers his eyes, attaching to the collar under his chin and behind his head with Velcro straps. The lightweight material allows the dog some vision – enough to navigate easily, but cuts out a significant amount of stimuli.

I've used the Cap successfully with several clients' dogs, and highly recommend it for car-reactive behavior. Most dogs seem to accept it easily, with little to no desensitization. It works exceptionally well with dogs who become aroused or aggressive in cars, barking or lunging from car windows at people or dogs on the sidewalk or in other cars. It's available in four sizes, to fit all breeds and sizes of dogs.

The Calming Cap, sold by Premier, is available only through trainers, veterinarians, and some pet supply stores. You can read about the Cap at [gentleleader.com](http://gentleleader.com), or contact Premier at (888) 640-8840 to find a dealer near you.



Cue your dog to lie down on the back seat. When he does, mark the behavior, with the click! of a clicker or a verbal marker (such as the word “Yes!”), and give him a treat. Drive a short distance while your helper continues to mark the desired behavior and reward your dog at a rate of reinforcement high enough to keep the dog in his down position. Depending on your dog, this may be every few seconds to start, or it may be a slower rate if your dog is already reasonably calm in the car.

Continue to drive short distances with stops in between to give everyone a break. Gradually increase the distance of your practice runs, while your helper gradually decreases the rate of reinforcement. As you increase the length of the runs, keep the time between reinforcements of a random interval – some longer, some shorter. This way, your dog won't get antsy as he starts anticipating the next click; he'll never know when it's coming! Have your helper ultimately fade the clicks and treats altogether as the car is moving, since you won't be able to click-treat safely when you're driving alone. Your goal is to have her reinforce polite car behavior only occasionally, and only when the car is stopped.

When your dog rides well in an empty

parking lot, move your practice sessions to a parking lot with traffic, so your helper can reinforce your dog for riding politely in a more stimulating environment. Again, start with a high rate of reinforcement. When he has impeccable manners in the parking lot with clicks and treats only when the car is stopped, you're ready to take it on the road, still with your helper present to reinforce appropriate car behavior.

With that step accomplished, you can fly solo. Go back to the empty lot and give it a trial run. If your dog has learned his lessons well, you'll zip through this part with ease. Drive a short distance with your dog lying down in his back-seat spot. *Don't try to click and treat while you are moving!* Stop, click, and treat.

As long as he's staying in his place, gradually increase the length of your runs, sometimes giving him a click and treat when you're stopped, sometimes not. When he's ready, move to a parking lot with traffic, and practice there until you're ready to face the real world. 🐾

*Pat Miller, CPDT, is WDJ's Training Editor. Miller lives in Hagerstown, Maryland, site of her Peaceable Paws training center. For book purchasing or contact information, see “Resources,” page 24.*

# Butt Scoot Boogie

*If you're lucky, you may never need to deal with your dog's anal glands. But you should know what can go wrong, in case your luck runs out!*

BY CJ PUOTINEN

**O**h, the smell! Anyone who's ever been in the same room when a frightened dog "blows" her anal glands or a veterinarian manually expresses them will never forget the malodorous experience. And anyone whose dog has suffered from impacted, infected, or abscessed anal glands can empathize with the animal's pain and discomfort.

It's wise for dog owners to be aware of the problems that can arise with these glands, so they can seek appropriate remedies on their dog's behalf.

## Where the problem lies

Dogs have two anal glands or sacs, one on each side of the anus, between the internal and external anal sphincter muscles. Technically, it's the anal gland that produces fluid and the anal sac that stores it, but most veterinarians refer to either or both when they mention anal glands or anal sacs. Also called scent glands, these organs produce a brown

or yellow liquid that is usually thin but which can thicken to a paste-like consistency. In small dogs, the glands are normally the size of a pea, while in large dogs they're the size and shape of a kidney bean. At least, unless something goes awry.

Dogs, wolves, and other canids aren't alone in having anal glands; cats, weasels, skunks, and various territory-marking mammals have them as well. Except for skunks, which routinely use their scent glands for defense, most animals release the contents of their anal glands only when they defecate or when extreme fear causes involuntary muscle contractions that expel fluid from the anal sacs.

Anal gland secretions are what make dogs smell fascinating, at least to other dogs. As dogs circle and inspect each other's hind ends, they're savoring anal sac fragrances.

In healthy dogs whose diets contain sufficient fiber or roughage, anal glands do nothing more than give fecal matter its distinctive fragrance. As stool is passed, the sphincter muscles squeeze the anal sacs and force their contents onto the stool's surface. But when sphincter muscles don't exert sufficient pressure, or if something blocks the flow of fluid, problems develop.

## Signs of trouble

The most common early sign of overly full, blocked, or impacted anal glands is scooting. Dragging her rear end over carpets, grass, or other rough surfaces is your dog's attempt to stimulate the release of anal fluid. Affected dogs may also lick or bite the anal area in an effort to relieve their discomfort.

Abscesses are boils, pockets of pus under the skin surface caused by bacterial infections that produce heat, inflammation, swelling, and acute pain. If your dog whimpers or cries while attempting to defecate; if there is blood, pus, or swelling close to the anus; or if he is in obvious pain when sitting or moving, he may have an abscessed anal gland.



**Dogs who "butt scoot" on the carpet may be giving you not-to-be-ignored information about a potentially serious condition: overly full or impacted anal glands.**

In many cases, impacted and even abscessed anal glands can be treated successfully at home, but it's always a good idea, especially if you're not yet familiar with anal gland problems, to have your veterinarian take a look. Some abscesses drain on their own while others need treatment.

Infected anal glands may require oral antibiotics, lancing, flushing, or other medical attention. For example, open channels or fistulas around the anus can result from infected anal glands, making the condition difficult to cure.

In severe cases, infected sacs can be so painful that the dog requires anesthesia before the sacs can be treated. Emptied anal sacs can be rinsed with a disinfecting liquid from an irrigation syringe and then filled with antibacterial ointment, a treatment that may have to be repeated several times. The most serious cases are resolved by the anal glands' surgical removal.

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### WHAT YOU CAN DO . . .

- **Get in the habit of checking your dog's anal glands for swelling, infection, or other problems.**
- **To help prevent problems, improve the diet and add fiber.**
- **Have your veterinarian show you how to express anal glands so you can do it at home if necessary.**
- **Report any infection or anal gland complications to your vet.**



## Finding the cause

No one knows why some dogs are predisposed to having impacted or infected anal glands, but overweight and physically inactive dogs tend to have more problems than slender, physically fit dogs. In obese dogs, fat skin folds may block the pores and prevent them from draining. It may also be more difficult for obese dogs to groom themselves and encourage natural drainage.

Small dogs are more at risk than large dogs, in part because their small glands have tiny openings. But even giant breeds can develop anal gland problems.

One of the most important factors in anal gland health is diet. According to Juliette de Bairacli Levy (see "Grandmother Nature," July 2006) in her *Complete Herbal Handbook for the Dog and Cat*, most sufferers of anal gland problems are overfed pets. "The trouble would not occur," she says, "if dogs were fed a natural diet which always included sufficient roughage."

Richard Pitcairn, DVM, PhD, lists three main causes of anal gland problems in his *Complete Guide to Natural Health for Dogs and Cats*. The first is overcrowding at home, which creates inadequate space for exercise and exploration as well as frustrated attempts to establish a territory. The second is constipation or infrequent bowel movements, especially as a result of inadequate outdoor exercise. Third, he blames toxicity resulting from poor diet and inadequate exercise. In the last cases, skin disorders and ear infections may occur as well.

To repair these problems, Dr. Pitcairn recommends improving the dog's diet and providing adequate exercise, the opportunity to go outside and have frequent bowel movements, and psychological "space."

Many holistic veterinarians recommend a raw diet that contains either the roughage of vegetables or raw bones. Opinions differ as to whether vegetables should be served in large chunks or pureed, how much vegetable matter should be mixed with meat, and whether bones should be whole or ground, but any of these additions can provide bulk that stimulates anal glands.

Levy recommends feeding raw meat in large chunks, never ground, explaining that ground meat requires little exercise on the part of the stomach and digestive tract. Foods that are too soft or too easily digested can contribute to anal gland problems.

Another helpful addition to the canine diet is coconut. Now that coconut has become a popular health food (see "Crazy about Coconut Oil," October 2005), most

natural foods markets and several online retailers carry coconut oil, unsweetened shredded dried coconut, and coconut flour.

Coconut oil is especially helpful to dogs with anal gland problems because it lubricates the intestines, acts as a stool softener, and contains medium-chain fatty acids that kill yeast, fungi, viruses, harmful bacteria, and parasites, making the dog who ingests coconut oil every day a less likely candidate for anal gland infections. Start with small amounts and gradually increase to about 1 teaspoon of coconut oil per 10 pounds of body weight, which is 1 tablespoon per 30 pounds, per day.

"In addition to coconut oil," says Bruce Fife, ND, coconut authority and author of *Coconut Cures* and other books, "coconut flour and shredded coconut are very good for dogs with anal gland problems because they are excellent sources of fiber. You can soak coconut flour or shredded coconut in water, broth, or other liquid so that it's well hydrated, then add it to your dog's food. Start with small amounts of coconut flour or dried shredded coconut and gradually increase to about 1 teaspoon coconut flour or 2 teaspoons dried shredded coconut per 30 pounds of body weight. Soak it well before mixing it with the dog's main meal."

Soaking is also recommended for more

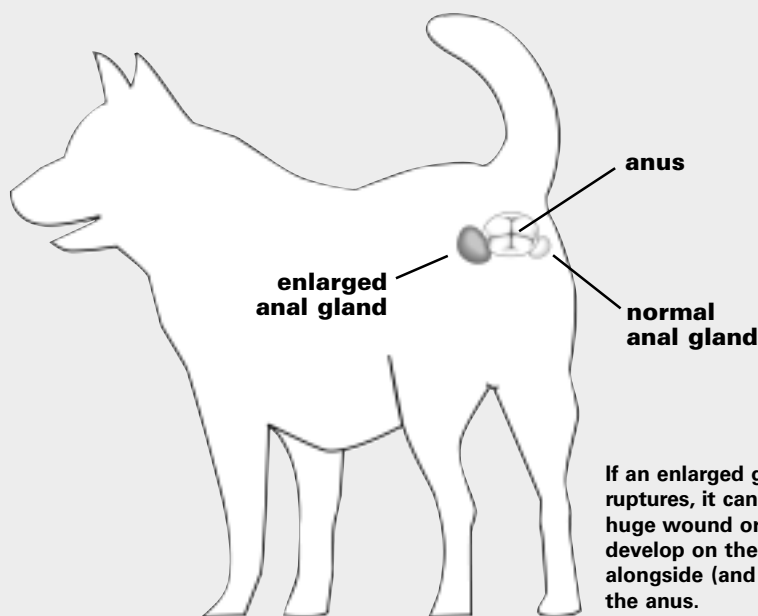
familiar sources of fiber, such as wheat bran and powdered psyllium husks. Any fiber supplement can contribute to constipation and intestinal blockages if given without sufficient fluid. The easiest way to prevent problems is to soak bran or psyllium overnight or for several hours so that it doesn't absorb fluids as it moves through the digestive tract.

Juliette de Bairacli Levy recommends soaking 2 tablespoons fenugreek seeds in 1 cup warm water, letting it stand for 24 hours, then giving the liquid as a drink and mixing the seeds into the dog's food. All of Levy's recommendations are appropriate for dogs weighing 40 to 50 pounds. Use more for large and giant breeds, less for small and toy breeds.

Another addition that seems to work well is dried fruit, such as prunes, apricots, or figs, which can be added to the dog's meals. For large dogs, try 2 or 3 dried prunes, apricots, or figs per day; for small dogs try 1 or 2 every other day. These dried fruits have a mild laxative effect, but their main benefit is their fiber. Like other high-fiber foods, they increase the size of fecal matter, producing larger stools that exercise the anal glands and help prevent their blockage. For dogs eating dry kibble, it's a good idea to soak dried fruit before adding it to food.

## (Somewhat) Gross Anatomy

The anal glands are located alongside of and not quite below the anus, not far under the surface of the skin. To express problematically full anal glands, one presses with one's forefinger and thumb into the tissue to the outside of where the gland can be felt, then firmly presses the fingers together and toward the opening of the anus.



If an enlarged gland ruptures, it can cause a huge wound or abscess to develop on the surface alongside (and involving) the anus.

English Setter breeder Joan Mizer in England told canine nutritional consultant Linda Arndt of Albany, Indiana, about a Rottweiler whose anal glands were chronically impacted until the dog's owner started giving him three pitted prunes daily. "After that," said Mizer, "the dog never again required anal gland emptying." When Mizer heard about the Rottweiler from her veterinarian 10 years ago, she had two English Setters whose anal glands had to be emptied frequently. She started adding three dried prunes to their food once a week and they haven't had an anal gland problem since.

"It is a lot easier to scatter a few prunes on food than to physically empty anal glands," she said. "Friends who have tried giving prunes to their dogs have experienced the same happy results."

The only exception to the dried fruit recommendation is the dog who suffers from a systemic yeast infection, such as candidiasis. Linda Arndt warns that many dogs diagnosed with allergies are in fact suffering from yeast overgrowth, a problem made worse by foods containing sugar, which includes all dried and fresh fruit.

Sources of fiber other than fruit are recommended for dogs with chronic allergies, frequent ear infections, and other yeast infection symptoms.

Additional recommendations from holistic health experts include adding finely minced wheat grass or other green herbs to the diet at the rate of 1 teaspoon per 10 pounds of body weight (1 tablespoon per 30 pounds) per day. Alternatively, you can feed chopped vegetables, such as carrots or celery; add aloe vera juice or gel to food at the rate of 1 teaspoon per 20 pounds of body weight per day; or add a chlorophyll supplement to the dog's food according to label directions.

## Express (the glands) yourself

Even in dogs who have never shown symptoms, anal glands should be checked periodically just to be sure that everything looks normal.

Veterinarians are used to expressing canine anal glands, which is a smelly but simple procedure. If it's ever necessary for your dog, have your vet show you how. This simple procedure can be done at home on anal glands that are full and not releasing fluid on their own, but *do not attempt to express anal glands that are painfully infected or abscessed.*

Expressing impacted anal glands is often easier after the area has been treated several times with a hot herbal compress or fomentation (see next section).

Professional groomers often perform this task when they are bathing the dog, to reduce the potential for creating a smelly mess, especially on long-coated dogs.

When you have experience with this task, you'll find that it may be most efficient and clean to hold a warm, damp washcloth or gauze pad over the area as you apply pressure to the glands. This is so the expressed fluid can be easily wiped away and won't squirt out and land on you – which is definitely an experience you won't forget.

But when you are a beginner at this task, the washcloth can make it difficult to see if you are squeezing in the right place, and whether anything is coming out! In this case, have gauze or cotton at the ready – and consider putting on some safety goggles or glasses. Really!

Raise the dog's tail and take a look. If the dog's anus was the center of the face of a clock, the glands would be located at around the numbers five and seven. The idea is to gently palpate the area with your thumb and forefinger to locate the glands. Think

of them as small grapes embedded in the dog's flesh; you want to squeeze the juice out of them, without expelling the "grapes" themselves. Firmly press your thumb and forefinger into the dog's flesh, outside of the area where the glands are located, and slowly squeeze the fingers together. If you do it right, you'll immediately see a thick fluid expressed on or around the dog's anus. Wipe away any expressed fluid with the tissue, gauze, or cotton. Check the fluid for blood or pus, either of which indicates an infection.

Again, it may be easiest to have your veterinarian or groomer show you how to do this. And you definitely want to seek the attention of your vet if the glands appear badly infected or abscessed.

Karen Doyle of Dogs Gone Grooming in Suffern, New York, has dealt with thousands of anal glands in her 26 years as a dog groomer. "I didn't learn how to express anal glands in grooming school because they didn't teach it," she says. "I learned by doing it on my own dogs. But even though it's a simple procedure, it isn't something I do routinely. With small dogs, impacted anal glands aren't usually serious, but whenever I see impacted anal glands in a large breed dog, especially on two consecutive visits, I suggest a visit to the veterinarian to find out what's going on.

"You can get acquainted with your dog's anal glands just by checking them from time to time," she continues. "Lift the tail, take a look, and gently touch the area. You'll be able to see at a glance whether the hair looks worn or bald from frantic licking or biting, and you can tell by touch whether the anal sacs are full or empty. Pay attention to whether the area is hot to the touch, looks inflamed or swollen, is obviously causing discomfort, or produces a thick rather than thin discharge. These are all symptoms that need attention."

## Herbal treatments

Juliette de Bairacli Levy's favorite way to relieve a dog's impacted anal glands is to apply herbs internally and externally.

Brew dandelion tea using leaves and/or flowers, she says, and add this to the dog's food and water as often as the dog will accept it. To brew the tea, use 1 teaspoon dried or 1 tablespoon fresh dandelion per cup of boiling water, cover, and let stand until cool.

Fomentations are hot compresses, made by brewing and straining a strong herbal tea. When applied to impacted or abscessed anal glands, they loosen, soften, and stimulate

## Resources

*Dr. Pitcairn's Complete Guide to Natural Health for Dogs & Cats*, by Richard H. Pitcairn, DVM, PhD, and Susan Hubble Pitcairn. Rodale Books, 3rd edition, 2005

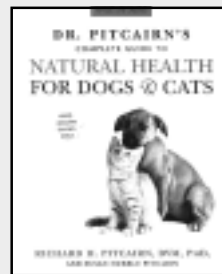
*The Complete Herbal Handbook for the Dog and Cat*, by Juliette de Bairacli Levy. Faber & Faber; 6th edition, 1991

Academy of Veterinary Homeopathy, [theavh.org](http://theavh.org)

Linda Arndt, Canine Nutritional Consultant, [greatdanelady.com](http://greatdanelady.com)

Jake's Remedy, from FrogWorks. Frances Fitzgerald Cleveland, (303) 378-6693, [frogworks.com](http://frogworks.com)

Karen Doyle, Dogs Gone Grooming, Suffern, NY. (845) 709-5001





the glands and their contents, helping glands flow on their own. For most dogs, fomentations produce immediate relief from discomfort. Impacted anal glands may immediately begin to drain, or applying another fomentation several hours later may release trapped fluid.

Fomentations can help abscessed anal glands by encouraging the abscess to come to a head, burst open on its own, and drain.

To prepare a fomentation, add 1 tablespoon dried herbs or 2 tablespoons fresh herbs to 1 cup boiling water, cover, and let steep for 10 to 15 minutes. If desired, add 1 tablespoon unrefined sea salt, which has its own healing properties.

Pour the hot tea into a bowl. When the tea is cool enough to touch without burning yourself but still very warm, saturate a clean washcloth or other absorbent fabric. Wring it out slightly so that it doesn't drip. If necessary, hold the washcloth open and exposed to the air to let it cool slightly. Test it on the inside of your wrist to be sure it isn't too hot. Fold the fabric in half and in half again. Hold the hot, wet cloth in place for three to five minutes, or until it begins to cool. Don't press hard, but apply just enough pressure to keep the fabric from shifting. Remove, soak the cloth again, and reapply for another three to five minutes.

Dr. Pitcairn recommends applying hot calendula fomentations twice a day for three days or longer. Other holistic health experts recommend hot chamomile, stinging nettle, lavender, red clover, or yarrow fomentations. Like calendula, these dried herbs are available in most health food stores.

For anal gland abscesses, add a teaspoon of coconut oil, 1 drop of lavender essential oil, and/or several drops of grapefruit seed extract to any of these hot teas. All of these additions have disinfecting properties. Obviously, if your dog has a really painful abscess, this treatment may not be appropriate. Use a fomentation or hot compress only if your dog is comfortable with it.

Once an abscess begins to drain, the area can be left alone, treated with a warm or cool compress, or sprayed with an herbal tea or with a mixture of 1 cup medicinal-strength tea and 1 tablespoon unrefined sea salt. A tissue, gauze, or cotton ball can be used to gently wipe draining pus from below the affected area.

As mentioned, serious cases may require medical intervention. Consult your veterinarian about any abscess or impaction that does not respond to home treatment or that has progressed to an advanced stage.



**It's all a little embarrassing, but remember: If it solves the problem and prevents the need for a painful surgery – one that does not always have the best results – then holding an herb-soaked washcloth on your dog's bottom is a good thing!**

## Aromatherapy

Although many essential oils that have disinfecting properties are not recommended for use around mucous membranes (because they can irritate or cause pain), some essential oils, when diluted with carrier oils, are gentle enough for application to abscessed or impacted anal glands.

The secret is to use a therapeutic-quality essential oil that has both disinfecting and soothing properties, such as lavender or sweet marjoram essential oil, and to dilute it in a carrier oil that is quickly absorbed, such as jojoba, grapeseed, or sunflower oil.

Hydrosols or "flower waters" are produced during steam distillation, and they combine minute traces of essential oil with the distilled plants' water-soluble constituents, making them safe and effective for pet use.

When used as a disinfecting hydrosol, essential oils that can otherwise irritate mucous membranes, such as tea tree or oregano, can be safely sprayed on the area to help heal the infection. (For instructions and recommended resources, see our aromatherapy series, published in the December 2004, January 2005, April 2005, and August 2005 issues.)

Jake's Canine Remedy, a topical spray developed by aromatherapist Frances Fitzgerald Cleveland, can be sprayed onto abscessed, infected anal glands. In addition to helping clear infection, inflammation, and itchiness, its essential oils have analgesic properties that help relieve pain. "If one of

my dogs had abscessed anal glands," she says, "I would definitely use it."

## Homeopathy

For abscessed or infected anal glands, Dr. Pitcairn, founder of the Academy of Veterinary Homeopathy and a classically trained homeopath, recommends Belladonna 6C. "Give one or two pellets every four hours for a total of three treatments," he recommends. "Give no food for 10 minutes before and after treatment. No further homeopathic treatment will be needed for the next 24 hours. If your dog is not noticeably improved by then, give Silicea 30C only once, providing no food for one hour before and one hour after treatment. The Belladonna helps with the initial inflammation and Silicea promotes the discharge of pus and encourages healing."

## An ounce of prevention

Anyone who has had to deal with anal gland problems knows that preventing anal gland problems is well worth the investment of time and effort. With the simple methods described here, you can help your dog enjoy a comfortable life free from the pain and discomfort of impacted or infected anal glands. 🐾

*A long-time contributor to WDJ and author of The Encyclopedia of Natural Pet Care, Natural Remedies for Dogs and Cats, and other books, CJ Puotinen lives in New York with her husband, a Lab, and a tabby cat.*

# Teach Your Dog to Read

*No, really! Dogs can be taught to recognize written words as cues.*

BY CJ PUOTINEN

**C**urling up with a good book? Maybe your dog would like to read one, too.

Don't laugh. If Bonnie Bergin, EdD, has her way, dogs all over the world will soon be reading – maybe not books and articles, but individual words or sets of words strung together.

Now president of the Bonnie Bergin Assistance Dog Institute, the world's only academic college that awards associate and master's degrees in dog studies, Dr. Bergin originated the service dog concept when she founded Canine Companions for Independence more than 30 years ago.

The dogs she worked with were so intelligent and responsive that from time to time she thought about teaching them to read. The idea stayed in the back of her mind until 2002, when she began a canine reading experiment.

Now she has written a book, *Teach Your Dog to Read: A Unique Step-by-Step Program to Expand Your Dog's Mind and Strengthen the Bond Between You*, which invites everyone to join her.

"It's an exciting project," she says, "because we're on the brink of a revolution.

Dogs who can read are the dogs of the future."

In the future that Dr. Bergin envisions, dogs and their human companions will have a means of communicating that goes far beyond what's possible now.

Dogs may, for example, combine their exceptional sense of smell with their ability to read and help medical doctors identify specific diseases, such as different types of cancer.

Service dogs working with the visually impaired will be able to recognize and look for exit signs, appropriate restroom signs, and other important markers.

Pet dogs will recognize and pay attention to signs that warn them away from furniture or kitchen counters, just as they will look for signs that invite them to relieve themselves in designated areas at highway rest stops.

Dogs participating in reading programs with children, adolescents, or adults will inspire and encourage those who are struggling to read by showing how they are learning to read themselves.

Most important, she says, will be the deepening of everyday communication between dogs and their humans. "I have been training my own dogs to go to posted signs saying *water*, *treat*, or *pet me*, to tell me what they want," says Dr. Bergin. "We're still in the early stages of this two-way communication, but it has incredible implications. Dogs who can read will find it much easier to share information, and the possibilities are endless. In every way, teaching your dog to read can help your dog be a smarter, better companion, and it will deepen and strengthen the bond that connects you."

## How to get started

Puppies raised at the Assistance Dog Institute are introduced to the written word at just a few weeks of age. They literally grow up reading. But while puppies and younger dogs may have an easier time learning to read, it's never too late (assuming that vi-



**Assistance dogs for people who have difficulty speaking would be wonderful candidates for reading lessons.**

sion problems don't interfere) to teach old dogs new words. Your first reading lesson can be this very afternoon. All you need are your dog, yourself, and a sheet of paper.

For those who would like to use Dr. Bergin's flash cards, her printed cues and cartoon stick figures can be downloaded from her website (see "Resources," page 24). But you can make your own flash cards by printing words by hand in large, dark block letters or by using your computer's largest, darkest font (avoid fonts with squiggles, serifs, or other elaborations). Print one word or cue per page in black ink on plain white paper, printed sideways ("landscape" orientation). You can laminate the cards for durability.

Begin with a cue that your dog knows well. "But don't start with sit," she suggests. "Everyone always starts every training session with sit, and it's a pattern dogs come

The Whole  Dog Journal™

### WHAT YOU CAN DO . . .

- **Make flash cards for the five behaviors your dog knows best and start teaching your dog to read.**
- **Work in short sessions, progress slowly, and give high-value rewards for success.**
- **Think of different ways to incorporate reading into your dog's life and training.**

to expect. I suggest starting with down or some other command.”

Make a list of 5 or 10 cues that your dog responds to readily when you give a verbal instruction. Dr. Bergin’s list includes down, sit, stand, roll (roll halfway over and expose stomach), turn (spin), shake, speak, bow, up (place paws on the edge of a table, countertop, desk, or wall), kiss, and go to bed. Save behaviors that involve a prop (such as placing paws up on a table or fetching a particular toy) until the dog is adept at reading other cues, because positioning yourself near a prop is a dead giveaway, and you want your dog to focus on the card and its word, not on your body language.

“We know that dogs can learn to read up to 20 written words,” she says, “from three-letter words that represent the most basic commands, to five-letter words that call for more dramatic responses, such as shake or speak, to three-word sentences such as ‘Get the shoe.’”

Start in a quiet room with no distractions. Clicker-trained dogs or dogs trained with positive reinforcement, says Dr. Bergin, are most likely to offer a variety of behaviors when they’re motivated to earn a reward, and motivated dogs who offer different behaviors learn quickly.



**Dogs can also be trained to recognize and respond to pictographs, as demonstrated by Chloe, a three-year-old therapy dog and her owner, author CJ Puotinen.**

## Day one lesson plan

Dr. Bergin recommends following these five steps in your first reading lesson (“down” is a perfect first word) and whenever you introduce a new word.

### 1. Get ready.

Hold your flash card in one hand behind your back. Hold a treat, ball, toy, or other favorite reward in the other, or, if you’re holding a clicker, place the reward where your dog can see it or knows it’s there.

Without touching your dog or giving any cues ahead of time, have your dog stand in front of you. Then:

### 2. Present the card, and

### 3. Immediately say the cue.

“Timing is essential,” says Dr. Bergin. “Your dog should get a glimpse of the word a split second before you say it. Also, if your dog is more used to hand signals than verbal commands, give the appropriate signal with one hand just as you bring the flash card out from behind your back with the other.” Avoid making eye contact with your dog, as that is a distraction. Look down at the top of the card or past your dog (see photo, below left).

### 4. Hold the card.

Hold the flash card still. Be sure you’re holding the sign with your fingers away from its letters. Don’t move. Wait for your dog to lie down.

### 5. Reward your dog.

As soon as your dog lies down, say “Yes!” in an enthusiastic, high-pitched voice. Dr. Bergin recommends clipping the “Yes!” so that it almost sounds like “Yesp!” as this will help you say the word faster. If you normally use a clicker to mark the end of a behavior, click as soon as the dog lies down.

While saying “Yes!” or clicking, move the card behind your back or set it on a table where your dog can’t see it. Leaving the card in sight is like repeating a cue after your dog has already performed the behavior.

Reward your dog with praise, a vigorous pet, a food treat or toy, or all of these so that he feels appreciated and looks forward to doing this again.

Repeat the exercise by doing the same five steps in exactly the same way. Then repeat it again.

During the fourth run-through, if your dog has been responding readily to the ver-

bal cue, present the card but don’t say anything or give a hand signal. Instead, just hold the card in front of you. Don’t jiggle or move the card. Hold still, exactly as you did in the previous exercise.

If your dog hesitates for more than a few seconds or seems confused, go back to step 3 and say the word “down” or give your hand signal. With time and practice, you’ll learn whether it’s more helpful to repeat a cue or to wait and let your dog figure it out.

As soon as he lies down without any prompting from you in response to of the “down” card, celebrate! Now is the time for over-the-top treats, praise, and enthusiastic rewards.

“Dogs love, need, and crave emotion,” says Dr. Bergin. “That’s why I prefer the word ‘Yes!’ to the click of a clicker. Charged feelings, preferably positive feelings, reinforce behavior. So shower your dog with praise.”

End today’s practice session on a high note and continue tomorrow. Limit each day’s training to six to nine exercises per flash card, no more than 15 minutes total. With young puppies, do considerably less, working in shorter sessions.

## Introducing a second and third word

To determine whether your dog is ready for a new word, test her to see if she responds to the “down” flash card without a verbal prompt or hand signal three out of five times.

To introduce a new word, such as “sit,” follow the same five steps as before.

Most dogs anticipate the card that they already learned, so don’t be surprised if your dog lies down. If that happens, don’t correct or punish her. Simply move back, encouraging your dog to follow, and repeat the sequence of actions.

Many dogs sit before lying down, so if this happens, you have a split second in which to click or say “Yes!” while she is still sitting.

As soon as your dog successfully sits, remove the card and reward her. Do the exercise two or three more times to reinforce the “sit” cue.

Now that your dog recognizes the word *sit*, start to mix things up. Without breaking stride or indicating in any way that something different is about to happen, show her the word *down* without saying anything.

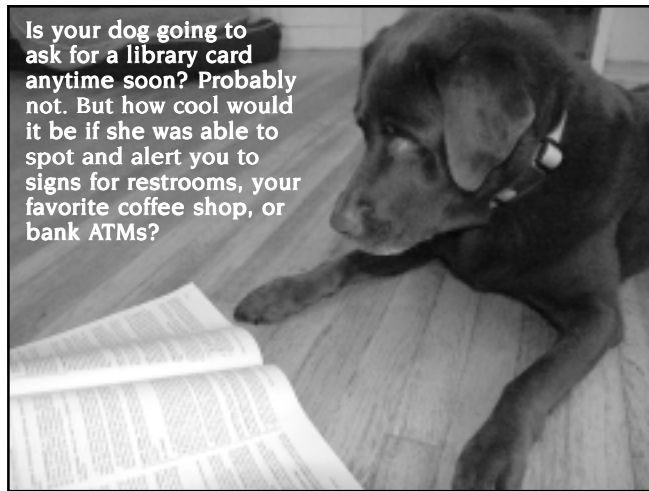
“Most dogs respond correctly by lying down,” says Dr. Bergin. “They get it! They can discriminate between the two words. If

your dog responds this way, congratulations are in order. Give a resoundingly positive ‘Yes!’ and be generous with praise and high-value food treats.”

If your dog doesn’t recognize the difference between *sit* and *down*, practice with each card a few more times and help out with verbal cues if needed. If your dog offers an incorrect behavior, either ignore the behavior or say “No” in a calm, serious, low-key voice. Saying “No” in this way tells the dog that this isn’t the behavior you want, so try something else. Put a lot of emotion into your “Yes!”

whenever your dog does something correctly, and keep emotion out of your “No” when she does something else. (See “Opinions About ‘No Reward Markers’ Vary,” below.)

End on a positive note – when your dog does the behavior you asked for, with or without a verbal cue, and you make a big fuss – and continue tomorrow. Limit each day’s training to about six to nine exercises



Is your dog going to ask for a library card anytime soon? Probably not. But how cool would it be if she was able to spot and alert you to signs for restrooms, your favorite coffee shop, or bank ATMs?

with each card, and with puppies, do less.

“It’s important to stop while you’re ahead,” says Dr. Bergin. “It’s easy to become enthused, especially if your dog catches on fast, but if you push too hard, you’ll exhaust your dog, feel disappointed, and you’ll both burn out. The best thing you can do is end early, end on a high note, and let your dog’s mind grapple with this new challenge while sleeping. A good night’s rest

can improve the next day’s performance.”

Continue to work in short training sessions. When your dog knows three words, start mixing them up and present them randomly. Always be sure your dog responds correctly to each word at least three out of five times before adding a new word. Use the same procedure for introducing each new word.

“Be patient,” says Dr. Bergin. “Whenever you introduce a new word, your dog’s overall performance will decline. Your dog knows sit, down, and stand, but

when you introduce the card for bow, he forgets everything. This is when reading becomes an effort for your dog, just as it was for us when we were kids. Be patient, stick to the program, work in short sessions, review the cards, and give verbal cues as needed. Your dog will be stretching his mind in new ways, and that’s hard work. Do everything you can to make the experience rewarding.”

By the third word, many dogs express their frustration by barking or vocalizing. Don’t correct or even acknowledge this, just ignore it.

Motivated dogs may offer every behavior they can think of in an effort to win the treat or reward. If your dog runs through her repertoire by sitting, lying down, standing up, spinning around, waving, bowing, rolling over, and so forth, don’t smile or laugh. Keep a straight face and calmly ignore or say “No” to each wrong answer and give a highly enthusiastic “Yes!” for each right one.

Some dogs begin shutting down when they feel confused, becoming less physically active and offering fewer behaviors. “You have to counteract that lethargy by being a good coach,” says Dr. Bergin. “Use whatever tools you have to infuse your dog with your infectious energy and enthusiasm for the upcoming exercises. Really cheer your dog on, wave favorite treats and toys, and make the whole experience positive, upbeat, happy, and rewarding, not a boring chore.”

A lack of interest at the beginning of a reading session is a bad sign, suggesting that your dog may be on the brink of burnout. If she turns her head away, walks away, or just doesn’t want to practice, take a break. “If I had to choose between burnout or stopping prematurely,” says Dr. Bergin, “I’d stop prematurely. Put the cards away for a few

## Opinions About ‘No Reward Markers’ Vary

In this article, Dr. Bergin describes using the word “no” in a specific way: as a “no reward marker” or NRM. This is a unique and *neutral* signal that lets the dog know that the behavior he is exhibiting is not the desired one, so he should try something else to find the desired behavior, for which he *will* be rewarded. Dr. Bergin recommends keeping any emotion out of your voice when using “no” in this way, so the dog is not discouraged, but merely understands that he should try something else. The word is offered as information, not as punishment. “A firm “No” should not sound threatening, angry, frustrated, or disappointed,” says Dr. Bergin. “Use it to inform, redirect, and guide.”

However, the success of the word “no” as an NRM may hinge on more than just the owner’s scrupulousness at saying “no” in a neutral way. Unfortunately, many dog owners use the word “No!” to stop their dogs from doing anything the owner doesn’t like – chasing a cat, sniffing a countertop (preparatory to jumping up and snatching some food, perhaps), barking at someone through the living room window. That’s why some dogs develop an unconscious negative association with the word; it becomes a precursor to being punished, or is experienced by the dog as punishment itself. When *these* dogs hear “no,” even in a neutral tone, they may just give up, thinking *anything* they do next will be wrong.

If your dog “gets” the concept of the neutral NRM, and keeps trying various behaviors when you mark his incorrect attempts with the word “no,” you’re doing a good job, just as Dr. Bergin describes! However, if he “shuts down” or stops offering different behaviors when you use the word, try saying it more brightly and cheerfully. Or, better yet, try a different NRM, one without any negative associations for the dog. Some trainers use a word like “Oops!” which naturally comes out of most people’s mouths cheerfully. Other suggestions include “not!”, “try again!” (or just, “again!”), “next!”, or “cold!” (from the children’s game where a person tries to find a hidden object and is told “warmer” or colder” based on his movements as he searches).

days or a week. Renew your dog's enthusiasm for life and training with favorite activities. And when you resume, keep your sessions short and positive."

In her book, Dr. Bergin provides detailed step-by-step lesson plans, training tips, and advice for preventing and solving problems. One chapter helps volunteers train their dogs for work with children in schools and libraries.

She also describes how learning to read will help dogs conceptualize, understand new ideas, make new connections, communicate more effectively, and enhance their relationships with humans.

## Understanding reading

After her first reading experiment with dogs being trained at her Assistance Dog Institute, Dr. Bergin spent the summer of 2003 studying the history of human reading. She learned that humans began their written communication by drawing pictures, which eventually became stick figures, which were eventually turned on their sides, which is how they became phonemes (symbolic sounds) and letters of alphabets.

"Our dogs were already recognizing words made of letters," she says, "so I moved on to cartoon stick figures, which I created on my computer. I was amazed at how quickly the dogs made the connection between their word command flash cards and the stick figures that illustrated those commands. I could show them a stick figure and they all did the corresponding behavior without being taught."

Dr. Bergin then brought a Stanford University researcher to the Institute to help her explore the canine mind with regard to reading. "I learned that printed words are hard for dogs to understand because they are abstract shapes that have to be identified and responded to, while stick figures might be easier to decipher but understanding them involves a higher level of cognition."

What amazed Dr. Bergin the most was the ability of reading dogs to conceptualize, to make connections between seemingly unrelated ideas.

"I know that there are people who still believe dogs can't think," she says, "despite all kinds of scientific evidence to the con-

## Dogs Help Promote Reading Skills in Others

Not only can dogs learn to read, they can actually help kids learn to read. Since 1999, registered therapy dogs have been visiting schools, libraries, and other facilities as Reading Education Assistance Dogs® or R.E.A.D.® Program participants.

Founded by Intermountain Therapy Animals in Salt Lake City, Utah, the R.E.A.D. program is dedicated to improving the literacy skills of children of all ages by providing them an opportunity to read aloud to a dog in a setting that is supportive and nonjudgmental. After all, the presence of dogs helps lower blood pressure and relieve anxiety – and dogs *never* correct your pronunciation.

In a pilot study conducted at a Utah elementary school in 2000-2001, children in grades 2 through 6 significantly improved their reading scores. In addition, teachers reported that the participants experienced decreased absenteeism, improved self confidence and self esteem, a sense of pride in their accomplishments, increased participation in field trips, clubs, and other extracurricular activities, improved hygiene, kinder and more respectful interactions with animals, better grades, and increased use of the school's library.

R.E.A.D. program volunteers work throughout the U.S. and in parts of Canada. The program is open to registered therapy dogs and other therapy animals.

For information, visit [therapyanimals.org/read/index.php](http://therapyanimals.org/read/index.php).



**Many children find that reading to a dog is fun and nonthreatening. Photo courtesy Intermountain Therapy Animals.**

trary. Well, up to this point I knew dogs could think, but I didn't think they thought very much. I would hear stories from people who got assistance dogs from me about how brilliant their dogs were, and I'd always take those stories with a grain of salt. I tended to dismiss them as anecdotal reports, nothing based on objective science, and I didn't pay much attention. Now I realize that the reports were probably quite accurate, not the exaggerated claims I had assumed them to be, and I wish I could turn the clock back and hear them all again. I would pay much more attention."

Dr. Bergin also learned that people who don't read cannot conceptualize the way people who read

can. "This helps explain why people who can't read are so often stuck and unable to change their lives. It's because they can't imagine anything different. Learning to read

unlocks all kinds of possibilities for them. I'm convinced that the same will be true for dogs and that dogs who can read will demonstrate degrees of intelligence, problem solving ability, and talent that we can't begin to imagine.

"The possibilities for reading dogs are endless," she says. "We just need to keep exploring them. Reading dogs are revolutionaries – and by teaching them to be literate beings, we can participate in their revolution. When you teach a dog to read, you're not just teaching him a cute trick to show your friends. You're developing his mind and helping him become a better problem solver. My hope is that these simple training techniques will transform your expectations about what your dog can learn and do at home, and that it will change the way that veterinarians, dog trainers, and breeders approach dog training forever." ❀

*WDJ contributor CJ Puotinen and her Labrador Retriever, Chloe, are members of the Hudson Valley Humane Society Visiting Pet Program ([HudsonValleyVisitingPets.com](http://HudsonValleyVisitingPets.com)), which is a R.E.A.D. Program affiliate. They live in New York.*

### INTERESTED IN READING?

**The Bonnie Bergin Assistance Dog Institute**, in conjunction with the Assistance Dog United Campaign, offers an annual **\$1,000 award** for the most innovative use of the ability of dogs to read. To enter, submit a written description of the innovation with practical proof of its application in the form of a DVD or VHS video to:

**Innovations in Dogs' Reading**  
c/o Assistance Dog Institute  
1215 Sebastopol Road  
Santa Rosa, CA 95407

# Dog Gone Dung

*Familiarity with your dog's poop will help you detect illness quickly.*

BY SUSAN WEINSTEIN

**Y**ou can learn a lot about your dogs' health from their poop. Its color, consistency, contents, odor, amount, and frequency can give you valuable, up-to-date information about their health. For example, it can provide early warning that your dog's diet may be unsuitable, or that she may be grappling with parasites, viruses, unfriendly bacteria, bad water, emotional upset, food allergies, or serious illness.

So try to check it out every day. Don't be shy! You might use a twig to poke it apart, although picking it up carefully with a bag or scooper may yield a similar opportunity to observe its qualities. This way, you'll come to know whether your dog's poop seems right or wrong, and when you need to do something about it.

Anytime you are not sure of what you're seeing, check with a vet, an expert in canine nutrition, or your reliable home library. Those specialty pet supply shops that actively promote the raw diet and sell ingredients for it often have staff who are very well-informed.

But there's no getting away from it — competent doggy-doo divination begins at home. And to recognize a problematic poop, we must start with a concept of the ideal excrement.



**"Normal" poop for each dog varies. Ideally, though, it is neither too hard nor too soft, and not terribly smelly.**

## The perfect poop

A dog's feces varies somewhat according to whether he eats kibble, canned, or home-prepared food. But all well-formed dog poo shares certain characteristics. First, healthy stool should have a *relatively* inoffensive odor. For another, it will typically be brown and of an even, well-digested consistency.

Pet food industry professionals use a scale of 1 to 5 to rate poop quality. Usually, 1 means liquid diarrhea, whereas 5 indicates a hard and dry stool. The industry generally agrees that 4 is ideal, says Claudia A. Kirk, DVM, PhD, Dipl. ACVN and ACVIM. Dr. Kirk, an associate professor of medicine and nutrition in the Department of Small Animal Clinical Sciences at the College of Veterinary Medicine, University of Tennessee, describes the perfect 4 as "a light- to dark-brown stool that is well-formed, firm but malleable, moist, and does not fall apart when picked up."

Understand that every dog has her own version of "normal." To be able to distinguish the good from the bad, you need to know your own dog's poop when she's absolutely *radiant* with good health!

## Feces facts

Poop is the by-product of the digestive process. Food is broken down into basic molecules in the stomach and small intestine, enabling the small intestine to absorb them. Enzymes break down proteins into amino acids, carbohydrates into sugar molecules, and fat into cholesterol and di- and tri-glyceride components.

Food particles not absorbed by the small intestine pass into the large intestine (the colon), along with gut secretions, pancreatic enzymes, bile salts, discarded intestinal cells, mucus, intestinal bacteria, secreted water, minerals,

The Whole  Dog Journal™

### WHAT YOU CAN DO . . .

- **Notice your dog's dung. A little familiarity can teach you a lot. Observe her poop every day.**
- **Support her digestion naturally with good food and, when needed, gentle holistic help.**
- **Don't change your dog's diet quickly; take it nice and slow to give her system time to adjust.**
- **Know what kind of stools signal a need for veterinary assistance. When unsure of what you see, ask your vet.**

and vitamins. This substance is typically green and soupy.

The party is not yet over when this matter (known as the "ingesta") reaches the colon, which absorbs much of the water, many minerals, some vitamins, and most bile salts. Any food that is still undigested provides nutrients for the normal microbes that live in the lower gut. Fermentation of these nutrients occurs there, producing volatile (and often smelly) gases, altering the pH of the colon, and even changing some of the food into short chain fatty acids, which are very important for the health of the colonic epithelial cells (colonocytes).

Fermentation is a normal part of digestion; it produces essential vitamins such as vitamin K. Vitamins, short chain fatty acids, certain minerals, and bile acids are absorbed across the colon along with large amounts of water. As the "leftovers" move toward the rectum, removal of the water concentrates the ingesta into what we know as feces.



By the time it comes out of the dog, poop is made up of unabsorbed nutrients, cells, bile pigments, volatile fatty acids and organic compounds, mucus, water, electrolytes, and additional metabolic waste products.

## Factors affecting stool quality

How wonderful it would be if we could catalog wayward types of feces and simply cross-reference them to find out whether a dog needs a new diet, more exercise, a particular remedy, or a medical procedure!

Unfortunately, poop defies neat and tidy classification. Problem poop can give us a helpful heads-up about a dog's possible ill health, but taken as a sign by itself "it can rarely pinpoint the cause or severity of the problem, since there is huge overlap across the disorders," states Dr. Kirk.

All kinds of things can upset the digestive system:

- Food digestibility
- Innate bacterial population
- Intestinal disease
- Toxins
- Pharmaceuticals
- Botanicals (herbs)
- Vitamin supplements
- Nutritional oils

- Nutraceuticals
- Food allergy or intolerance
- Vaccination
- Exercise
- Emotional stress

How can we tell the difference between feces affected by what a dog ingests as opposed to those reflecting the presence of viruses, bacterial infections, parasites, systemic or organ disease or failure? "Unfortunately, (the latter) will look just like poop from dietary indiscretion, food allergies, and so forth," Dr. Kirk says. So we need to look at all of these different factors.

### ■ Food digestibility

The amount of food molecules entering the colon depends on a variety of factors. One is the dog's ability to digest an otherwise satisfactory meal. Another is the inherent digestibility of the food provided. If the diet is digestible, fewer molecules end up in the colon and fermentation is minimal. But when lots of undigested nutrients enter the lower small intestine and colon, fermentation can be profuse.

Whereas the colon normally extracts water from digested food, changing it from liquid into something solid and well-formed, the production of large amounts of gas and

short chain fatty acids, when severe, will draw water back into the colon. "This is the same process that occurs in people with lactose intolerance – producing gas, diarrhea, and flatulence," Dr. Kirk explains.

Doggy diets vary considerably concerning contents, combinations of foodstuffs, and degrees of processing. Nevertheless, Dr. Kirk offers a few generalizations about some common pet food ingredients that can affect stool quality.

Fibers constitute an important component of the diet. Some are fermentable and others are not. The type, amount, water solubility, water holding capacity, and fermentation rate of a fiber source significantly affects stool quality.

However, opinions differ about good sources of fiber for dogs. Dr. Karr-Lilienthal, companion animal specialist and lecturer in Companion Animal Science at the University of Nebraska in Lincoln, recommends oats, carrots, and brassica vegetables such as broccoli. She likes beet pulp, since about half ferments in the gut, where it's easily broken down by friendly bacteria, and because the indigestible half improves the stool quality.

Jennifer Lennon, founder of Healthy Paws, a Toronto company that produces raw

## How a Dog's Life-Stage Can Affect His or Her Stool

### Females in estrus

Some think the hormonal cycle of intact females affects their digestive systems. Others observe no differences when females are in season.



### Pregnant dams

During the first six weeks, the stool should not change. As females eat more during the last few weeks of pregnancy, they'll have a greater amount of stool. This may be loose. Diarrhea may be seen before or after the mother gives birth. Stools become blackish after mothers eat placental material.

### Nursing mothers

Lactating moms sometimes have looser stools. Their poop may also be lighter in color, a result of greater fluid intake.

### Nursing puppies

Healthy nursing pups tend to produce soft feces of a pudding consistency and light yellow to light brown color.

### Formula-fed puppies

These puppies' poop should be similar to that of nursing puppies. But formulas may produce diarrhea and very frequent defecation. The culprit is often feeding management issues such as giving cold formula, over-feeding, and using contaminated feeding equipment.

### Teething puppies

Sometimes these little ones have softer, less formed stools. The stress of dentition could be a cause.

### Weaning puppies

While they adjust to solid foods, puppies may at first have looser stools. But as they complete the transition, their feces typically become firmer and darker in color. During this period, pups often experience changes and emotional stress that also cause diarrhea.

### Young dogs (up to a year old)

Young dogs may be gassier than older dogs and have smellier poop. This could be due to the stress of continuing physical and emotional changes in their lives, or possibly because the

gastrointestinal tract is still developing.

### Spayed or neutered adults

Although spaying and neutering doesn't appear to affect poop quality, Dr. Karr-Lilienthal indicates that stress at the time of the surgery (as with any other veterinary procedure) could cause an episode of diarrhea.

### Senior dogs

Many adult dogs produce good stool even as they age. But others in their elder years may tend toward dryer poop and constipation. Possible causes include drinking less water, being overfed by an owner who hasn't

yet realized the senior dog needs fewer calories, and related obesity. Another factor would be getting less exercise due either to arthritis or to the calmer energy and greater focus of the golden years.

### Any dogs

Regardless of life-stage (unless it's a puppy who has diarrhea), if an adult dog's poop strays from the norm for a day or so, it should not be cause for alarm (with urgent exceptions; see page 18). But when poop is significantly and persistently less than perfect, it's important to try to get a handle on the cause.



diets for dogs and cats, favors ground *whole* black oil sunflower seeds, including the hulls; ground whole veggies, particularly roots such as beets and carrots; and ground whole pumpkin seeds.

Corn often gets blamed for causing voluminous, gloppy stools. However, Dr. Karr-Lilienthal believes that the story is a little more complicated. "Corn has a bad reputation partly because it's a fairly common food allergen," she says. She believes that while corn offers some nutritive benefits when used to provide fiber, a problem arises when pet food companies use corn – or other cereal grains – as a *primary* source of *protein*.

On this basis, she says there's a positive correlation between the amount we pay for our dogs' nutrition and its quality. The cheapest foods, such as generic store-brands and others, are usually formulated with inexpensive plant-derived proteins; their fiber sources may be low-cost wheat middlings or peanut hulls. The nutrients in foodstuffs like these aren't readily available to the animal, she warns.

"It's actually more cost-effective to feed a more expensive, higher quality diet. You have to feed a *lot* more of those really cheap foods to get the right amount of nutrients into your animal. As a result, more comes out the other end that they're not able to utilize. Sometimes those animals are more gassy, too, because of the poorly digested proteins reaching the large intestine – a lot of odor comes from that."

But not all plant proteins create the same problems. Soy is highly digestible; its issue (besides being another common allergen) is that its carbohydrates are *too* fermentable and can cause flatulence.

Dr. Karr-Lilienthal believes that dogs need a minimum of 4 percent good quality fiber; most pet foods provide a range of 4 to 10 percent. A raw diet that regularly includes ground whole vegetable matter will more than meet this requirement.

### ■ Bacterial population

The bacteria that inhabit a dog's gut play an important role in her food's digestion and fermentation. The balance of intestinal bacteria is affected by both diet and drugs such as antibiotics.

Over time, intestinal bacteria adapt as much as they can to what the individual dog eats. A dog who dines on the same brand and type of commercial food daily will normally adapt to that diet and produce consistent stools.

## What Frequency Is Normal?

Frequency, meaning how often a healthy dog poops, depends on the amount of fiber in the diet, according to Dr. Lisa Karr-Lilienthal. "An adequate amount of good quality fiber makes a dog more regular, as it does in humans," she says. Typically, we can expect a dog to have one to two bowel movements a day.

But like consistency, frequency varies according to what type of food the dog eats, and again *within* each food type. Dr. Karr-Lilienthal raises a concern about some of the "better" commercial diets – those that have a greater animal protein-to-fiber ratio than others may at the same time contain insufficient fiber to promote regularity. Dogs who eat "super-premium" commercial kibble or canned foods may therefore pass stool as infrequently as every other day. This contrasts with dogs on raw diets that have a high fiber-to-protein ratio; they tend to poop more often.

Again, fiber quality makes a difference. And so do other factors such as sufficient water intake; the amount of water a dog drinks each day and the level of moisture in the diet itself both come into play.

In contrast, the poop of dogs who regularly consume a variety of foods, as those who feast on raw victuals usually do, tells a somewhat different story. The stool quality of such a dog usually falls within a consistent *range* of what's normal for that individual.

In either case, changing the diet too quickly or adding something new can cause bacterial overgrowth and excessive fermentation, resulting in diarrhea. This is why it's important to allow a dog time to adjust to new ingredients in the diet, or to new brands or types of commercial foods.

### ■ Intestinal disease

Any disease that affects the intestine, whether caused by parasites, malabsorption, ulcers, tumors, food allergies, bacteria, viruses, or other culprits, can contribute to vomiting and altered stool.

### ■ Toxins

Toxins can come from many sources. Normal foods, plants, excess bile salts, metabolic by-products, and even the dog's own bacteria can produce them. Toxins can block absorption, alter motility, destroy normal intestinal cells needed for digestion, and stimulate cells to secrete excess water and electrolytes, all of which can create problem poop.

Keep in mind that *any* time your dog has a persistently abnormal stool, seek professional advice early.

### ■ Pharmaceuticals

Anything that upsets the tummy can affect stool quality. Chemotherapeutic drugs and laxatives (obviously!) are good examples. Antibiotics commonly disrupt the

normal intestinal bacterial population, producing side effects such as diarrhea. Opioids often cause constipation. Medications containing iron may cause constipation and darken the stool.

There are too many examples to list here. Always find out about the possible unintended effects of *any* drug before you give it to your dog!

### ■ Botanicals (herbs)

Again, the possibilities are many. Some herbs may cause toxicity in an individual animal depending upon the dosage and other factors. Others, like nettle, alfalfa, or flaxseed, may cause digestive upset (and dermatological reactions) if given in large quantities.

As with drugs, learn all you can before using any herb, and administer it responsibly.

### ■ Vitamin supplements

Supplemented in appropriate amounts, vitamins shouldn't cause a problem. However, Wendell O. Belfield, DVM, and others following his lead recommend using the sodium ascorbate or calcium ascorbate form of vitamin C. This is because the ascorbic acid form is hard on some dogs' stomachs. Oil-based vitamins, such as E and A, may soften stools as oils tend to do. Large doses of B vitamins may cause stomach upset and vomiting or, less commonly, diarrhea.

### ■ Nutritional oils

Large amounts of oils (for example, flax, fish, corn, and others) will cause greasy stools and possibly diarrhea if added too quickly or if given in excess. Introduce them gradually to your dog's diet.

## ■ Nutraceuticals

Some will cause diarrhea. MSM, ursodiol, SAM-e, and chondroitin sulfates have reportedly caused GI upset in some dogs. Again, introducing them slowly may help.

## ■ Food allergy or intolerance

Food allergy or intolerance can cause intermittent to frequent vomiting, diarrhea, weight loss, loss of appetite, itchy skin or ears, eosinophilic plaques, and a number of less common disorders. Feces quality can range from normal to diarrhea and with or without mucus or blood, depending on the severity of the allergy and what part of the intestinal tract is most affected. Stools will often be lighter in color, and diarrhea obvious, but not always.

## ■ Vaccination

According to Dr. Kirk, a dog should not normally have a stool change immediately following vaccination; a reaction may indicate an allergic reaction to the vaccine. This would usually produce diarrhea that may or may not include mucus or blood, and (or) vomiting, vasculitis, and hives. She states that vaccines for leptospirosis and rabies are most commonly associated with this kind of reaction.

Note that allergic reactions and vaccine anaphylaxis have many other clinical signs, including acute respiratory distress and death—or, later, immune-mediated phenomena such as thrombocytopenia or anemia. If you observe any change that makes you suspicious of an allergic reaction following *any* vaccination, inform your vet right away. Subsequent exposures tend to get worse and could result in death.

## ■ Exercise

Dogs need regular exercise for their digestive health. Not enough physical activity can encourage constipation, as it does in people. But suddenly increasing a dog's exercise level can cause diarrhea and lead to dehydration, according to Dr. Karr-Lilienthal, "because it really stresses the animal out (physically). Instead, slowly build their condition."

## ■ Emotional stress

Never underestimate the effects of *emotional* stress on a dog's well-being and digestive processes, no matter what her age. As Dr. Karr-Lilienthal says, "*Anytime* a dog is

stressed he's more likely to have diarrhea. Dogs are very emotional creatures!"

## Common dung disorders and how to treat them

There is also quite a long list of the ways in which a dog's poop can diverge from a normal appearance and consistency:

- Diarrhea and loose stool
- Constipation and dry stool
- Dog is straining
- Poop that is flat on one side
- Greasy feces
- Extreme bad odor
- Absence of stool
- Odd colors
- Odd contents
- Poop contains hair
- Feces contains mucus

While treatment for these conditions will vary based on the individual and the severity and duration of the abnormal poo, the following are some generalized descriptions and treatment recommendations.

### ■ Diarrhea and loose stool

Diarrhea is the most common sign of digestive disturbance. While it's *often* of little concern, it can be serious. Diarrhea's causes are almost infinite, including infections, an ill-suited diet (one containing ingredients that the dog is allergic to or intolerant of), emotional upset, ingestion of toxic or bacterial-laden substances, worms, and many more. A lot of dogs can't digest the lactose in milk products and get diarrhea from that.

Diarrhea results when things move along too quickly for the colon to extract enough water for the stool to take form. If it occurs only once or twice and then resolves itself, the dog's body was probably clearing itself

of material that was inappropriate, irritating, or teeming with unfriendly bacteria.

However, you'll need to be concerned when diarrhea is severe, contains or smells of blood, contains raspberry-jam like mucus, is accompanied by other signs of illness, or continues for more than a couple of days. In these cases, it could be telling you either that the

diet is wrong for the dog or that the dog may be—perhaps urgently—ill. Even in less dramatic cases, dehydration is always a danger with diarrhea; and chronic diarrhea can lead to malabsorption and long-term degradation of health.

In general, if diarrhea appears simple and uncomplicated with no other symptoms, wait a day or two. Provide plenty of water! Give your dog's immune system a chance to do its work. Think about what she might have gotten into that she shouldn't have. If the diarrhea doesn't clear up, start looking to either the diet or illness for answers.

Consult with a vet anytime you see additional symptoms, after two days with no improvement, or immediately if your young puppy has the runs.

### ■ Constipation and dry stool

Possible causes for constipation include feeding a very high-fiber diet to a dog who doesn't drink enough water to hydrate the fiber; lots of bone meal in the diet; iron supplements; opioid drugs, or consumption of indigestible items like wool, hair, plant material, rocks, or kitty litter. Lack of exercise, obesity, diseases that decrease water intake or increase output (such as diabetes, renal disease, liver problems, etc.), and hypothyroidism can all cause constipation.

More possible causes of constipation include neoplasia (growths) in the GI tract, motility disorders, and abnormal anatomy. Anatomic issues such as a broken pelvis, narrow pelvic canal, rectal or anal strictures, perineal hernias, and an enlarged prostate can constipate a dog. Any pain, including postural, can discourage a dog from defecating. A dog locked in the house all day may also become constipated from holding onto feces too long.

Ideally, every dog should have available a source of fresh water at all times. This is true even for dogs who eat raw diets and canned foods, which contain lots of moisture. However, if you're gone all day or if you crate your dog (and especially if you feed dry kibble), provide water in the morning and assure unrestricted access to it in the evening and at night, so that he can drink until satisfied.

See if you can arrange things so that your dog is not alone and indoors all day. Old dogs, especially, need enough fiber in their food and a predictable routine to support their regularity.

For constipation, well-known animal herbalists Mary Wulff-Tilford and Greg Tilford suggest offering organic, live-



**Black or tarry stool may indicate bleeding in the upper GI tract.**

cultured yogurt. If the dog is straining, they recommend ground flaxseed, psyllium husk, or marshmallow root to lubricate the intestines; give 1/4 tsp. of any of these herbs for each 20 pounds of body weight plus lots of water. Fresh chickweed may also help.

If constipation is chronic, reevaluate what you're feeding your dog. If the digestive system has suffered long-term damage, you'll need to do further research for more lasting solutions. Thoroughly check out the safety of any herb or drug you consider giving to a pregnant animal.

Should people give their dogs human-style laxatives for constipation, or drugs for diarrhea? "Not without your veterinarian's input and instructions for appropriate dose," cautions Dr. Kirk, because:

1) Some of the most familiar drugs for humans are toxic in dogs and cats. For example, the common painkiller Tylenol can cause acute liver failure in both animals.

2) Some medications may contain other drugs that pets shouldn't have, but they are listed in a form that owners would not recognize.

3) Determining the correct dose for a dog is more complicated than it appears. One does not necessarily scale up and down drug doses on the basis of weight alone. On top of that, there are species differences in tolerance and doses. "So while Kaopectate, Lomotil, and Pepto-Bismol can be used under certain circumstances," Dr. Kirk says, "check with your vet first to make sure of the correct dose, and that the drug does not interact with other disease conditions or medications the pet may be taking."

4) Over-the-counter human drugs are designed to be used for 1 to 2 days, often following a dietary indiscretion. Long-term use is not advocated.

From a holistic view, it's far better to look for and deal with the *cause* of poor stool quality or digestive unpleasantness instead of using a drug to control or prevent symptoms. For short-term disturbances, such as uncomplicated constipation or diarrhea, fasting is often the best answer.

Dr. Kirk advises, "For dogs with dietary indiscretion, a 24-hour fast with only clear liquids, followed by slow reintroduction of

the normal food, or starting with a bland diet such as cottage cheese and rice, or giving a therapeutic intestinal diet, works better than drugs." A number of holistic dog care books describe how to fast a dog safely, reintroduce foods afterward, and create natural therapeutic intestinal diets.

#### ■ Straining

Anything that causes constipation could cause straining, plus any inflammation of the colon, rectum, or perianal region. Also seen with lower urinary tract disease. You must figure out whether the straining is related to defecation or urination, as *urinary* obstruction can be rapidly fatal.

#### ■ Poop that is flat on one side

An enlarged prostate can press against a male dog's rectum, causing him to strain and then pass a stool that appears flat on one side due to squeezing past the obstacle. It may also have a squishy or mushy consistency, for the same reason. If you see one-side-flattened feces, have your dog's prostate checked.

#### ■ Greasy feces

A sign that your dog is not digesting the fat in his food. If it continues, look into possible causes of malabsorption, including pancreatic trouble, parasites, or others.

#### ■ Extremely stinky

Excessively stinky stools can occur for a variety of reasons. In Dr. Kirk's experience, high meat diets typically produce the worst odor due to the skatols and sulfides produced during meat breakdown.

In contrast, Lennon has found that with appropriate raw fare, dog poop frequently has almost no odor at all. As with most other aspects of stool quality, a healthy dog on raw rations may exude a wider array of aromas in her feces than a dog on processed fare, but Lennon has seen dogs on processed food whose stinky poop has become perfectly pleasant after switching to raw comestibles. Again, the suitability of the diet to the dog and the degree to which the dog has adjusted to the diet will play a crucial role in the olfactory aspect of doggy-do.

In any case, feces should never smell alarming; a scent of blood or severe rancidity should alert you to something amiss. Beans and some cruciferous vegetables may cause flatulence, due to certain starches that break down poorly in the intestinal tract. Food allergies or sensitivities can result in smelly gas and stool, too.

## When to Call the Vet

The first **four** conditions described below are **life-threatening**; contact your emergency clinic without delay. But if you see **any** of the following, you should call your veterinarian and discuss the symptoms.

- Raspberry jam-like mucus; could indicate hemorrhagic gastroenteritis (HGE)
- Profuse liquid diarrhea with pungent, iron smell, containing blood or pinkish-brown; could indicate parvovirus
- Stool containing frank red blood; indicates injury or illness in GI tract
- Any diarrhea in a puppy; could rapidly cause life-threatening dehydration
- Severe diarrhea in an adult dog; could cause dehydration
- Diarrhea immediately following vaccination
- Diarrhea that's frequent (more than once or twice and gone), painful, bloody, contains mucus, or returns every few days or so
- Diarrhea with poor appetite, weight loss, and (or) lethargy
- Black or tarry stool; could indicate bleeding in upper digestive tract
- Abnormal stool accompanied by other signs of illness
- Hard dry stool with straining, especially when recurrent
- Absence of defecation for two days. Call vet immediately if this is accompanied by vomiting, dehydration, and/or hard and tender abdomen (could indicate a blockage)



**There are numerous causes and types of diarrhea. To identify the problem, record instances of your dog's abnormal elimination.**

Intestinal parasites, such as *Giardia*, create their own end-products that also smell. Viruses, such as canine distemper, have a specific effect on the GI tract, as well. Both are examples of conditions that produce distinctive, identifiable stool odors.

#### ■ Odd contents

Poop may at times contain indigestible food chunks such as raw carrot, whole nuts, or unchewed (whole) seeds. Grass is also common; dogs eat it for many reasons, one of which is to help them clear out troublesome matter from their digestive tract.

However, nonfood items such as bits of plastic, wood, or other intriguing things can cause a blockage or other problems. If their appearance is only occasional, you probably don't need to be concerned. Do, though, look for ways to stop your dog's access to nonfood "extras."

#### ■ Hair

Dr. Karr-Lilienthal points out that when a dog's poop contains significant quantities of his own hair, it can indicate a problem – but one involving the *skin*, rather than the digestive system! If you see a lot of hair, think: possible allergies, fleas, or insufficient grooming – by you or by the dog!

#### ■ Mucus

Mucus means an irritated colon. The trouble can range from mild to severe, and is caused by common culprits – "wrong" bacteria, parasites, viruses, sticks passing through, etc. If it doesn't clear up after a bowel movement or two, you'll need to figure out what's up.

#### ■ Absence of stool

If she otherwise seems perfectly fine, don't worry if your dog occasionally fails to defecate for a day or two. But if she hasn't passed any stool or gas for a couple of days, or is vomiting, dehydrated, and/or her abdomen feels tender and hard, she may have an intestinal blockage. If blockage is *total*, your dog will need immediate surgical intervention, as this condition quickly becomes life-threatening.

Signs of *partial* blockage include slightly bloody or watery brown feces, which may indicate that the intestine has telescoped in on itself. Swallowed objects that can block



**Poop containing chunks of undigested food, especially difficult-to-digest ingredients such as raw carrot, is not a cause for alarm. Chunks of plastic or wood should trigger a hunt for and elimination of the nonfood items from the dog's reach.**

the intestines include stones, bones, toys, or, according to Dr. Karr-Lilienthal, chunks of hard chew items such as "Greenies." By the time you notice it, the damage caused by blockage may already be quite severe.

#### ■ Odd colors

When everything's in balance, look for a range of light to dark browns – anything from ocher to mahogany. A complex mix of healthy digestive secretions color feces this way. Stool produced by a dog on a raw diet will vary more in hue than will that from commercial food. Be aware that dyes used in some foods or treats can stain feces almost any color. Fresh-ground raw beets may innocently stain poop a deep red that can look (and ooze) almost like blood, whereas commercial diets that contain beet pulp probably won't have the same effect.

**Yellow**, hard stool often results from a diet that contains a lot of bone meal. Soft yellow stool can indicate a serious problem like a viral infection, especially if it's yellow diarrhea, with or without vomiting.

**Green** may not always mean there's something wrong, but it can indicate imbalances. These may be momentary and caused by something recently eaten, or reflect longer-term problems such as parasites or an organ issue.

**White or very pale and hard.** This is often produced by dogs on a raw diet containing bone meal. It may appear in one feces but not in another on the same day. It may be slightly difficult for the animal to pass, as it can be comparatively hard, but is not usually a cause for concern.

The addition to the diet of good quality vegetable fiber can help to ease the situation. Some raw food advocates maintain that harder solids such as bone meal or undigested bits of carrot in the stool help keep dogs' anal glands healthy by stimulating them to express as the poop passes by.

**Bloody (red).** This is an emergency situation. It could have been caused by the dog having swallowed something that's causing damage in the GI tract, or by a severe food allergy. It can also signify other problems, such as cancer. Frank red blood or mucus that looks like raspberry jam can indicate life-threatening disease. When you see bloody stool, have your dog

seen by your vet right away.

**Black or tarry.** Tarry or black stool, possibly resembling coffee grounds, may signify bleeding from the stomach or from high in the small intestine. Blood from high in the GI tract gets digested on its way through, which is why it comes out black. This is obviously an emergency. However, a meal of raw organ meats, such as brain or spleen, may also produce black feces in healthy dogs. Dr. Kirk adds that Pepto-Bismol can cause very dark stool. If you don't *know* why your dog's stool is black, get qualified help, quickly.

#### Poop proud

So, dig in and get a load of what you can learn from your dog's poop. What it has to tell you could save your dog's life, and will certainly give you guidance about how to best support his health.

And don't feel too self-conscious! Most likely, the only one who will stare at you while you're scrutinizing what he left behind is your dog, himself. While he might find your sudden interest a bit curious, he *won't* think it's weird. After all, poop is one of his favorite subjects. Don't you care more about his opinion – and his well-being – than what anyone else thinks? 🐾

*Susan Weinstein is a freelance writer with a strong interest in animals and holistic healthcare. Presently, she is working on a book about pets and stress with Paul McCutcheon, DVM. Weinstein lives in Grafton, Ontario.*

# Up With Pups!

*How to build a healthy foundation for your new pup's body and mind.*

BY RANDY KIDD, DVM, PHD

Maybe I am what my wife calls me: a grumpy old man. I know that her assessment of me is close to right whenever I see a litter of puppies – admittedly so cute, so precious, so darling – and the first thing that comes to my mind is “Think ahead!”

There is simply no phase of a dog's life that demands more preparation than when our cute little puppies are making the transition from a life in the womb to a life of personal independence and social interdependence with the family of man.

Responsible, holistic puppy care begins long before the puppy arrives at the home-stead. In fact, the first step to creating a healthy puppy is the selection of the puppy's parents! The best predictors of long-term health of puppies are the health history and personality of the parents. Breeding stock should be proven to be sound in body, mind, and socialization.

The next step has to do with the care and feeding of the mother, which has a *huge* impact on her puppies' health. If your family will be a part of the dam's pregnancy and whelping, your preparations should actually begin long before she is bred. By strengthening the mom's organ-system and immune-system functions, you will help ensure that she is able to “build” uncompromised, healthy puppies.

## In the womb

After fertilization, the eggs spend several days migrating from the oviducts and forming firm attachments to the wall of the uterus. Fertilized eggs that attach to the middle portions of the uterine horns are in the

best position to receive the dam's transferred nutrients; larger and healthier placental attachments provide better nourishment for the developing puppies.

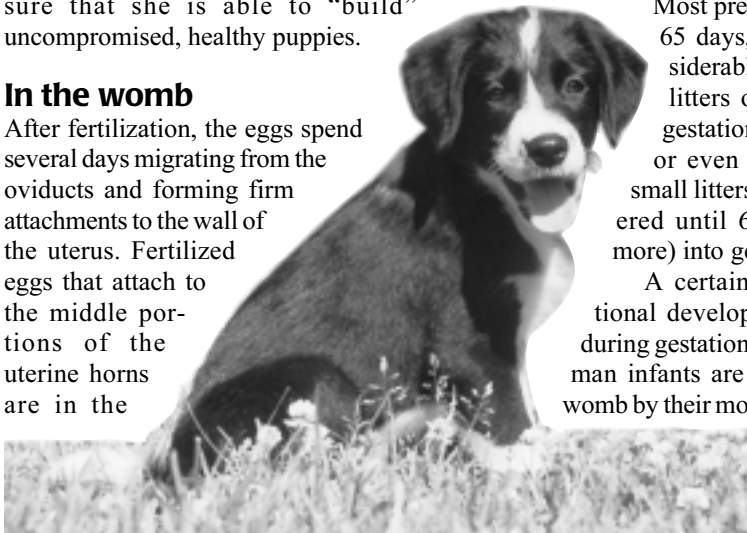
Puppy development in the uterus is rapid. During the first two weeks the embryonic cells differentiate into all the cells that will be needed for the body's development. At about two weeks of age the fetus is tiny, but has a head, spine, limb buds, and tail. At this stage it is still being nourished by the yolk sac, an attachment to the fetus that develops from the ovum. This early time is the most critical stage of development; any drugs or diseases in the mother now can severely damage the fetuses.

By the end of three weeks, all of the tissues and organs necessary for life have developed. At about three weeks the fetuses can be felt if the mother is reasonably thin.

By day 35 after fertilization, all of the puppy's body characteristics are apparent. By day 40 the eyelids, claws, hair, and skin color are visible, and the puppies' skulls can be felt through the mother's abdominal wall. At 42 to 45 days of fetal age the pups have the form of miniature dogs, and their skeletons can be seen on X-rays. From this time until birth, three weeks later, the fetuses simply continue to grow.

Most pregnancies last 62 to 65 days, but there is considerable variation. Large litters often have shorter gestation (perhaps 57 days or even shorter), whereas small litters may not be delivered until 67 to 68 days (or more) into gestation.

A certain amount of emotional development also occurs during gestation. We know that human infants are influenced in the womb by their mothers' personalities and lifestyles. I'm not sure that we need to chant calming



The Whole  Dog Journal™

## WHAT YOU CAN DO . . .

- **Breeders must plan months and months in advance, building the mother's immunity and selecting just the right mate to create the mentally and physically healthiest pups. Buyers should purchase pups only from breeders who can explain their health and pedigree choices.**
- **Pay attention to developmental “deadlines” for socializing puppies. A pup who has not been socialized by 12 weeks of age has missed the best learning opportunities of his lifetime.**

mantras throughout our dog's pregnancy (although it can't hurt!), but I am convinced that puppies born into a calm and nurturing household typically end up being calm and healthy themselves.

## Vaccination

Whether or not to vaccinate is a delicate subject for holistic-minded caretakers, and the question of vaccinating during pregnancy is even more controversial. We want the mother to pass the maximal possible level of antibodies against common diseases to her puppies, and vaccinations are one way of assuring this.

As a general rule, modified live virus (MLV) vaccines are contraindicated during pregnancy, but some veterinarians believe that many of the killed vaccines are relatively safe to give during the last few weeks of pregnancy. By giving appropriate vaccines about two weeks before whelping, they argue, we assure that the maximal



amount of vaccine-produced antibody will be present to be passed on to the pups. However, killed vaccines typically yield the highest percentage of allergic reactions.

Another argument against vaccinating the mother during pregnancy is that, since her immune system has been altered to allow for the presence of developing puppies (which are actually foreign bodies of a sort), gestation is a time of maximal immune compromise – and vaccines given then may not be effective. Vaccinating a female when she is in heat may also prevent the vaccine from being fully effective.

As a holistic practitioner, I like to see puppies adequately vaccinated against the predominant diseases when they are puppies. Immune-competent dogs will develop all the immune-ability they are capable of with these early vaccines, so once titer tests confirm the pup's antibody response to the vaccine is adequate, I don't feel further vaccines are necessary.

Once again, for breeding stock, the most important thing is to know the history of the parental stock and to know whether they have been reasonably disease-resistant in their lifetimes. When in doubt, vaccine titers should be used to evaluate the breeding dog's immune status before she comes into season or is bred.

## Internal parasites

Internal parasites are another concern during pregnancy, as much for the human children that may handle the puppies as for the puppies and their mother.

The larvae of the roundworm (*Toxocara canis*) lie latent in the mother until around the 42nd day of gestation. Then, when the mother's natural immune system is suppressed by hormonal changes, the larvae cross the placenta into the puppies, most of them setting up residence in the puppies' livers. Some larvae also migrate to the mother's mammary glands, and these can be passed to the puppies through her milk.

Dogs can also be infected by consuming eggs from the soil in the environment (generally through normal grooming) or by consuming a prey animal (usually a rodent) that is carrying developing worms. Larvae can live in the soil for months.

*Ancylostoma caninum* is the most common hookworm of dogs (and cats) in the northern hemisphere. Hookworms suck blood from the intestinal wall and are considered the most pathogenic (harmful) parasitic infection of young dogs. Severe infestations can lead to profound anemia

and death in puppies.

Most dogs are infected initially by oral contact with larvae, which crawl out of infected feces and move to the surface of the soil or vegetation. Puppies can also become infected by ingesting the milk of infected mothers. Larvae can live in the soil for months – a continuing source of infection.

Humans are not a normal host of the canine hookworm, but on contact with infective larvae, they can develop a condition called creeping eruption or cutaneous larva migrans (itchy skin).

Almost all puppies (experts estimate 90 to 100 percent) are born with roundworms and/or hookworms, or will be infested with them shortly after birth, even if the mother has tested negative for worms. (Detection during pregnancy is nearly impossible for several reasons.) With this in mind (and considering the potential for infecting children who will come into contact with the puppies), some vets recommend de-worming the mother several times during her pregnancy and de-worming the puppies several times, beginning about 3 or 4 weeks after birth.

## Whelping

Unless you want the newborn pups to arrive on your new satin bedspread, construct a whelping box a few weeks before the pups are due, and get Momma Dog accustomed to using it. Position it in a quiet, secluded, draft-free place. Line the floor of the box with a thick layer of newspapers, cover this with a warm layer of heavy towels or a mattress pad, and provide a heat source that will produce 85° to 90°F at floor level. Make sure there is adequate space in the whelping box for mother and pups to escape from the heat if they want to.

A whelping box for a large dog can be about four to five feet square; a smaller dog's box can be about two to three feet square. One side is low so the mother can easily get out; barriers are also put in place to enable the pups to get away from their mother when they need to.

Prepare family members for their potential role of cleaning and drying the arriving pups, but make sure everyone understands that most mothers will simply

want to be left alone. In fact, a whelping female can stop the birth process until gawkers (or, in the wild, predators) leave the area.

The female about to give birth may become nervous up to 36 hours before parturition ("parturition," the act of giving birth, is from the Latin *parturire*, to have the pains of labor). She may pace, appear anxious, and try to build a nest or dig a hole in the ground. She also stops eating and may shiver or even vomit. Hormonal influences usually cause the mother's temperature to drop to less than 99° F within about 24 hours of the onset of parturition.

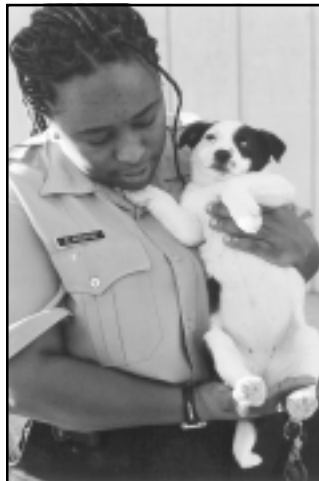
There is a normal sequence of events that will occur during the birthing process, and whelpologists divide these into three stages.

Stage I, cervical dilation, is marked by uterine contractions that are due to an increase in estrogen, accompanied by a decrease in progesterone and pressure against the

cervix. The dam will be restless, turning around in circles and panting; she may also vomit. All signs increase in frequency and intensity for up to 12 hours as this stage progresses. She will then alternate between Stage II, expulsion of the fetuses, and Stage III, expulsion of placentas.

After delivering a pup, the mother licks the membrane off the pup and severs the umbilical cord with her teeth. (Mothers that have a dental structure where the teeth don't meet may not be able to chew the cords – yet another reason to look at her physical characteristics before you have her bred.) Within 5 to 15 minutes after each pup is born, its placenta is passed. It is normal, but not necessary, for the mother to eat the placentas – although she may vomit if she eats more than one or two.

Pups are typically born every 30 to 60 minutes. They may be delivered head first (about 60 percent are delivered this way) or tail first; either way is considered normal. The birth of the first pup should occur within four hours after the mother is in strong labor, and the normal interval between pups only rarely goes beyond two hours. Veterinary assistance may be required if these basic time lines are exceeded.



**All puppies benefit from de-worming, especially if their background is sketchy.**

If the mother ignores the pup or doesn't clean it, you may need to assist in the process. Tear the placental membrane and remove it from the puppy's head and nostrils. Gently suck (a large-sized syringe is a good tool here) and swab fluid from the mouth and opening of throat, and then gently swing the puppy headfirst in a downward path while supporting its head and trunk in a dry, warm towel. If respirations don't begin spontaneously, the pup may need chest and facial massage with a dry warm towel.

To encourage breathing, stimulate the acupuncture point Governing Vessel 26. GV 26 is located on the midline of the nose, on the upper lip just below the nostril openings. This point is an acute emergency point – good for treating shock, anoxia (lack of oxygen), cardiac arrest, or collapse. The point can be stimulated with anything sharp at hand: the point of a knitting needle, the nail of your index finger, or an acupuncture needle, if you happen to have one.

Newborn puppies are not equipped with a great thermoregulatory system, so they need to be kept warm and dry. Usually a 25 watt bulb hung over the whelping box will provide enough heat. During the first week, the temperature under the heat lamp should be about 85° to 90°F. This should gradually be decreased to about 75°F over the next three weeks. If a mother leaves her pups for half an hour in a typical room temperature of 72° F, their normal body temperature of 100°F drops to a chilling 94 to 95°F.

Colostrum is a specialized milk the mother provides for a short amount of time after giving birth. It is rich in nutrients, but most importantly it supplies protective antibodies to the puppies. Since a puppy's immune system does not develop until several weeks after birth, the pup relies on its mother's antibodies for whatever immune-capability it will have. About 80 percent of the immune-capability that the puppy receives is from colostrum; the remaining 20 percent is passed through the placenta during pregnancy. It is thus absolutely critical that puppies receive the colostrum within hours after birth; production of colostrum occurs only shortly after birth, and a puppy's digestive system is set up to absorb it for only a short time.

Shortly after whelping, the mother will gather all the pups to her and feed them. This is a good time to observe general health; a newborn pup may look and move like an amoeba, but it should actively seek a teat to suck. Once there, the pup should be able to latch on and suck strongly.

After the first feeding is a good time to give the puppies their first exam. All pups in the litter should be approximately the same size. An unusually small puppy may be an indication that it has some sort of genetic defect. The runt of the litter may require supplemental feeding for normal development. Even though they are tiny creatures, pups should have a sturdy feel of substance about them. They should have an active sucking reflex; and they should not persistently cry or whine.

If the mother refuses to feed the litter (or one member of the litter), or if she is not providing enough milk (indicated by persistently crying puppies), you may need to provide supplemental feedings. Commercial milk substitutes are available; check with your vet.

### Birth to weaning

From birth to weaning can be the most enjoyable time of all because the mother will do most of the work, including the feeding and cleaning up the puppies' feces – so long as she is given enough fuel to get the task done. You have three main jobs: a) monitor the pups to see that they are growing normally; b) give the nursing mother plenty of good-quality nutrients (to feed the litter the bitch may require more than 150 percent of the nutrients she needed for herself); and, c) make sure that all the pups get handled on a many-times-a-day basis.

A puppy's eyes are shut and her ears are sealed at birth; they begin to open at 10 to 16 days of age. By 28 days, a pup's vision and hearing are almost as good as an adult's. Pups can sit up at two weeks of age and stand at three weeks.

Pain sensation is present at birth, but it may take several seconds for pain to regis-

ter with the brain. By three weeks, a pup registers pain as quickly as an adult dog.

The growth rate of puppies varies widely, depending on the size of the dog. Birth weights can multiply more than tenfold within the first seven to eight weeks, and energy needs are about twice that of adult dogs the same size.

Smaller-breed puppies have a higher metabolic rate per pound and reach maturity quickly; medium-breed puppies grow at a moderate rate. By the time he reaches adult size, a smaller-breed dog may have multiplied his birth weight 25 times; a larger dog's weight may have increased 100 times. Large- and giant-breed puppies normally grow at a slower rate. If we attempt to speed this rate (by feeding a diet containing excess calcium or other nutrients, as the most common example), the puppies are more vulnerable to developmental diseases of the skeletal system.

While physical aspects of the growing puppy are important, equally important is his social development. The mother will have a primary impact on her puppies' early social skills. She controls puppy behavior by licking, nipping, growling, biting, and leaving the vicinity. The amount of control the mother exerts early on will help to mold the pup's personality as it develops into an adult. Good mothering skills will show the puppy what is expected without applying corrections too aggressively. If the mother is too aggressive, the pup may grow into a dog that is less active socially; such dogs also tend to perform poorly on tests of mental ability.

Human contact is also crucial during the growing phase and social development. Exposing the puppies to an enriched environment is important. As they mature, frequently taking them away from the mother to areas that offer a safe, slow, but ever-increasing amount of mental stimulation will also prove valuable.

Weaning is a natural and gradual process that mother dogs have been doing for eons. Our job is to provide food for the puppies. Beginning at about three to four weeks of age, mix up a watery gruel of the puppies' food, and let them nose into it. You may need to encourage some of the pups. As they all get the idea, you can gradually decrease the fluid in the food.

Weaning should be complete by six to eight weeks of age, and puppies will be ready for a new home at eight weeks. Both of these are critical time frames. Pups should stay with the litters and their mother until



**A kitchen scale can be used to weigh puppies, to ensure they are thriving.**

they are at least eight weeks old; the primary time for learning socialization skills from their mother occurs when the pups are between six and eight weeks old.

About eight weeks of age is the perfect time to be totally weaned away from mother and move on to another home. If a pup stays with the mother and litter past 10 to 12 weeks of age, it becomes more difficult to socialize to the family of humans.

Of course, we can't always control the factors that will go into producing the healthiest puppies (although, I might argue, we can try, by *planning* to purchase a puppy from a breeder who can prove she has taken care of all of the above!). For many of us, those factors are out of our control – like when we adopt a puppy from a shelter. Even so, there is still much we can do to help assure that the puppy we intend to make a part of our family reaches his or her potential.

## Acquiring a puppy

Preparations for a puppy's arrival will support your training efforts and his long-term health. For starters, don't choose on impulse; give some thought to the selection process. The cute little bundle of fur will be with you for 10 to 15 years or more. Be realistic about the type of dog that will fit into your family environment.

If at all possible, get a puppy that a) you can socialize, or b) has already been well-socialized. There's only a small window of time during which a puppy is most accepting of new people and experiences: from 8 to 12 weeks. Puppies who were sequestered throughout that period usually grow into fearful adults.

Your puppy-to-be should pass your own physical exam. Pups should have bright eyes, a shiny coat, and they should move easily with no limps or gimps. Compare one pup to others in the litter and check for symmetry of body parts. A healthy pup will feel substantial when you pick it up, squirm a bit, and eventually relax in your hands. Make sure your purchase is contingent on veterinarian approval, and take the pup immediately to your vet for a final check.

## Things that can go wrong

Most puppies are raised to weaning without any major problems. However, sometimes things do go wrong.

Although most whelpings go without a hitch, it is a time of stress, and things can go wrong. Hypoxia (reduced oxygen supply) or lack of proper nutrition are the most common causes of death in neonates (newly



**Kids are great at socializing puppies, but don't rely on them for basic training and routine puppy care; that's your job.**

born), and these two factors are compounded if the pups become chilled or wet.

Studies show that about 17 percent of puppies die before weaning, but after weaning the rate falls to 4 percent. Most of the puppy losses (56 percent) occur during the first week of life; there is another mortality peak at weaning. Thus, the puppy's first week is the most critical, and it is the time to monitor progress of all the litter members closely. Experienced breeders identify puppies with special neonate collars, and weigh each individual daily. If any of the puppies seem to be failing to thrive, the mom and the entire litter should be seen by a veterinarian as soon as possible.

**Bacterial infections** (neonatal sepsis) are more common in puppies with parasites, those who were not kept warm enough, failed to receive adequate nutrients from the dam, or were born with defects of the immune system. A variety of "bugs" may be responsible; usually gram negative bacteria predominate. Affected pups may have an unusual clinical presentation or signs may be virtually absent. They often cry and become restless and weak, or develop hypothermia or diarrhea. Failure to thrive is a common symptom, but may be difficult to assess without further testing, including at least a CBC and possibly other tests. Treatment consists of warming the puppies, fluid therapy if necessary, and antimicrobial therapy. This is one time when the big guns of Western medicine are indicated.

No matter what therapy is used – natural medicines or conventional drugs – it is important to note that drug/biochemical distribution in puppies younger than five

weeks old is different from adults. Compared to adults, puppies have a lower total body fat, a higher percentage of total body water, lower concentration of albumin, and a poorly developed blood-brain barrier. Dosages need to be reduced by 30-50 percent of adult dose and/or the frequency of administration will need to be changed. Most drugs ingested by the mother will appear in her milk, but generally only at about 1 to 2 percent of her dosage.

**Malnourished puppies** are smaller, lighter, exhibit feeble attempts to suck, and/or are not attaining the expected weight gain for their age. High-pitched, constant crying or inactivity with an accompanying weak sucking reflex are advanced indications of malnourishment. When you handle these puppies you may also be able to detect reduced body tone and muscle strength.

These puppies often respond well to added nourishment. Commercial milk replacers are available, and the pups can be fed using a feeding tube or small baby bottle. As a rule, extremely weak puppies, those without a sucking reflex, or pups with a body temperature under 95°F do not have good survival rates, no matter the effort expended.

**Puppy hypoglycemia** is an idiopathic syndrome in toy breeds of dogs that is seen in the first six months of life. It seems to correspond with a relative immaturity of the liver, but can usually be managed by providing frequent meals of a commercial puppy diet. The problem usually resolves as the animal matures.

**Fading puppy syndrome** is actually a catch-all, descriptive term that includes many or all of the diseases that cause a puppy to fade or not thrive.

As the dog moves from puppy to adolescent, we humans become more and more involved in its healthy progression through life. The pup's developing immune system is now ready to be stimulated in specific ways; vaccines and wormers will have to be considered; he will have to adapt to new routines and new foods; and he needs to become housetrained and further socialized to other people and animals – all within a very short few weeks. ❖

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## RESOURCES

### TRAINING AND INSTRUCTION

Pat Miller, CPDT, Peaceable Paws Dog and Puppy Training, Hagerstown, MD. Train with modern, dog-friendly positive methods. Group and private training, Rally, behavior modification, workshops, intern and apprentice programs. Call her at (301) 582-9420 or see [peaceablepaws.com](http://peaceablepaws.com)

The Association of Pet Dog Trainers (APDT) has references to member trainers in your area. Call (800) 738-3647 or see [apdt.com](http://apdt.com).

Please note: APDT is dedicated to building better trainers through education, promoting dog-friendly methods, and encouraging their use. APDT's membership is composed of trainers from across the spectrum of training philosophies. Membership does not necessarily ensure all members employ similar training methods, nor does APDT set standards of skill or competence. APDT encourages (but does not require) its members to use training methods that use reinforcement and rewards, not punishment, to achieve desired behavior.

### HOLISTIC VETERINARIANS

American Holistic Veterinary Medical Association (AHVMA), 2214 Old Emmorton Road, Bel Air, MD 21015. (410) 569-0795. Send a self-addressed, stamped envelope for a list of holistic veterinarians in your area, or search [ahvma.org](http://ahvma.org)

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### BOOKS

WDJ Training Editor Pat Miller is author of two books: *The Power of Positive Dog Training* and *Positive Perspectives: Love Your Dog, Train Your Dog*. Both books are available from DogWise, (800) 776-2665 or [dogwise.com](http://dogwise.com)

*Dr. Kidd's Guide to Herbal Dog Care* and *Dr. Kidd's Guide to Herbal Cat Care* are published by Storey Books, (800) 441-5700 or [storeybooks.com](http://storeybooks.com)

*The Encyclopedia of Natural Pet Care* and *Natural Remedies for Dogs and Cats*, by WDJ contributor CJ Puotinen, are available from DogWise, (800) 776-2665 or [dogwise.com](http://dogwise.com). Puotinen is also author of several books about human health including *Natural Relief from Aches and Pains*, available from your favorite bookseller.

### TEACH YOUR DOG TO READ

*Teach Your Dog to Read: A Unique Step-by-Step Program to Expand your Dog's Mind and Strengthen the Bond Between You*, by Bonnie Bergin, Ed.D., and Sharon Hogan. New York: Broadway Books, 2006. \$9.95.

Flash cards of words and cartoon stick figures can be downloaded at no cost from [assistancedog.org/readingdogs](http://assistancedog.org/readingdogs)

The Bonnie Bergin Assistance Dog Institute, Santa Rosa, CA. (707) 545-DOGS; [assistancedog.org](http://assistancedog.org). The Institute, in conjunction with the Assistance Dog United Campaign, offers an annual \$1,000 award for the most innovative use of the ability of dogs to read. To enter, submit a written description of the innovation with practical proof of its application in the form of a DVD or VHS Video to: Innovations in Dogs' Reading c/o Assistance Dog Institute 1215 Sebastopol Road Santa Rosa, CA 95407

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*How to teach your dog to retrieve, give you the fetch item easily, and keep coming back for more (until you say not to).*

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*This fast-paced sport can be used to focus dogs who have a hard time learning, and even redirect dogs who become reactive around others.*

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*How to identify and select healthy and irresistible treats.*

### The First Few Weeks at Home

*How to get your new puppy off on the right foot in your home.*

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*Tick removers  
Electric toothbrushes  
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Leashes  
Small-dog car seats*